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2013 APR - 1 P 4: 36

State Regulation

Mail Station 9708 PO Box 53999 Phoenix, Arizona 85072-3999 Tel 602-250-2661 Jeffrey.Johnson@aps.com

April 1, 2013

Docket Control Arizona Corporation Commission 1200 W. Washington Phoenix, AZ 85007

RE:

Arizona Public Service Company's Resource Planning Annual Filing for Historical

Year 2012; Docket No. E-00000V-13-0070

Pursuant to A.A.C. R14-2-703, Arizona Public Service Company is filing its Historical Resource Planning report for 2012. The confidential portion of this filing will be provided to Staff upon execution of a Protective Agreement in this matter.

If you have any questions regarding this information, please contact me at (602)250-2661.

Sincerely,

Jeffrey W. Johnson

JJ/cd

cc:

Brian Bozzo Terri Ford Barbara Keene Arizona Corporation Commission DOCKETED

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Arizona Public Service Company

RESOURCE PLANNING INFORMATION FOR THE HISTORICAL YEAR 2012

In Compliance with

Arizona Administrative Code R14-2-703

April 2013 Filing

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	A.A.C. Regulation R14-2-703, Sections A & B	Location	
A.	A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of demand-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:		
A.1	 Hourly demand for the previous calendar year, disaggregated by: a. Sales to end users; b. Sales for resale; c. Energy losses; and d. Other disposition of energy, such as energy furnished without charge and energy used by the load-serving entity; 	Tab I	
A.2	Coincident peak demand (megawatts) and energy consumption (megawatt-hours) by month for the previous 10 years disaggregated by customer class;	Tab II	
A.3	Number of customers by customer class for each of the previous 10 years; and	Tab III	
A.4	Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of demand management measure.	Tab IV	
В.	A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of supply-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:		
B.1	For each generating unit and purchased power contract for the previous calendar year:	Tab V	
	 a. In-service date and book life or contract period; b. Type of generating unit or contract; c. The load-serving entity's share of the generating unit's capacity, or of capacity under the contract, in megawatts; d. Maximum generating unit or contract capacity, by hour, day, or m such capacity varies during the year; e. Annual capacity factor (generating units only); f. Average heat rate of generating units and, if available, heat rates at selected output levels; g. Average fuel cost for generating units, in dollars per million 	onth, if	
	Btu for each type of fuel;		

h. Other variable operating and maintenance costs for generating units, in dollars per megawatt hour;

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	A.A.C. Regulation R14-2-703, Sections A & B	Location
B.1 (c	cont.)	
	i. Purchased power energy costs for long-term contracts,	
	in dollars per megawatt-hour;	
	j. Fixed operating and maintenance costs of generating	
	units, in dollars per megawatt;	
	k. Demand charges for purchased power;	
	I. Fuel type for each generating units;	
	m. Minimum capacity at which the generating	*
	unit would be run or power must be purchased;	
	n. Whether, under standard operating procedures, the	
	generating unit must be run if it is available to run;	*
	o. Description of each generating unit as base load, intermediate,	
	or peaking;	
	p. Environmental impacts, including air emission quantities (in	
	metric tons or pounds) and rates (in quantities per	
	megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur	
	dioxide, mercury, particulates, and other air emissions subject	
	to current or expected future environmental regulation;	
	q. Water consumption quantities and rates; and	
	r. Tons of coal ash produced per generating unit;	
B.2	For the power supply system for the previous calendar year	Tab VI
	a. A description of generating unit commitment procedures;	
	b. Production cost;	
	c. Reserve requirements;	
	d. Spinning reserve;	
	e. Reliability of generating, transmission, and distribution systems;	
	f. Purchase and sale prices, averaged by month, for the aggregate	
	of all purchases and sales related to short-term contracts; and	
	g. Energy losses;	
B.3	The level of self-generation in the load-serving entity's service	Tab VII
D.O	area for the previous calendar year; and	140 11
D 4		77 -1 X777
B.4	An explanation of any resources procurement processes used	Tab VIII
	by the load-serving entity during the previous calendar year that	
	did not include use of an RFP, including the exception under	
	which the process was used.	

Tab I

R14-2-703 Section A.1.a

Attached is the response to this section.

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Arizona Public Service Company 2013 Resource Planning Filing For Historical Year 2012 R14-2-703 Section: A.1.a

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Arizona Public Service Company 2013 Resource Planning Filing For Historical Year 2012 R14-2-703 Section: A.1.a

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Arizona Public Service Company 2013 Resource Planning Filing For Historical Year 2012 R14-2-703 Section: A.1.a

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Tab I

R14-2-703 Section: A.1.b

Hourly demand for the previous calendar year is not available. Monthly megawatt-hours (MWh) are listed below.

SALES FOR RESALE 2012

DEC	27,404
NOV	27,481
OCT	41,955
SEP	45,785
AUG	63,302
JUL	61,175
NOI	112,999
MAY	92,089
APR	658'69
MAR	60,603
FEB	54,489
JAN	46,369
	ENERGY (MWH)

Tab I

R14-2-703 Section: A.1.c

Hourly demand for the previous calendar year is not available. Monthly MWh are listed below.

ENERGY LOSSES 2012

DEC	176,351
NOV	145,927
OCT	142,622
SEP	155,223
AUG	191,097
JOL	215,472
NOL	195,787
MAY	168,491
APR	126,249
MAR	152,201
FEB	160,357
JAN	217,935
	ENERGY (MWH)

Energy losses shown are exclusive of APS unregulated activities.

2013 RESOURCE PLANNING ANNUAL FILING **ARIZONA PUBLIC SERVICE COMPANY** FOR HISTORICAL YEAR 2012

Tab I

R14-2-703 Section: A.1.d

Hourly demand for the previous calendar year is not available. Monthly MWh are listed below.

COMPANY USE

2012

DEC	5,038
NOV	5,014
OCT	4,895
SEP	5,800
AUG	5,823
IOL	5,798
NUI	4,674
MAY	4,830
APR	4,485
MAR	4,799
FEB	4,677
JAN	4,873
	ENERGY (MWH)

Tab II

R14-2-703 Section A.2

Coincident peak demand (megawatts) and energy demand (megawatt hours) by month for twelve months ending December 2012 is attached.

On-Peak Off-Peak 9 am 9 pm, M-F & All Weekends

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** Total Residential ***

ANNUAL	15on 7,624.8	6,846.8	7,270.0	4,639.9	4,754.4	on 3,798.4	son 4,257,459 32.1%	8,997,280 67.9%	13,254,739	son 1,005,074	0.498	19.8%	31.8%	43.4%	1,100	6.48	2.62
WINTER (Nov-Apr)	Summation ind Max by Season 7,624.8 6,314.9 7	5,112.0	6,065.8	Class Peak by Season 9.9 2,610.7	3,162.1	Coincident Peak by Season 798.4 2,723.4	Summation by Season 1,354,427 4,2 27.5%	3,569,855 72.5%	4,924,282	Customer Averages by Season 201,014 1,009,134 1,0	Seasonal Factors	17.8%	35.6%	56.3%	Seasonal Averages	5.94	1.95
SUMMER W	Summation Is 7,624.8	6,846.8	7,270.0	Class Pe 4,639.9	4,754.4	Coincident 3,798.4	Energy Sumr 2,903,032 34.8%	5,427,425 65.2%	8,330,457	Customer Av 1,001,014	Seasol 0.498	24.9%	40.0%	54.5%	Season 1,387	7.01	3.29
Dec 12	6,314.9	5,100.2	6,065.8	2,150.3	2,377.6	1,996.1 20th@0800	219,415 25.6%	636,372	855,787	1,017,371	0.316	18.6%	49.3%	58.7%	841	6.21	1.96
Nov 12	5,582.7	4,531.4	5,305.1	1,782.2	1,906.9	1,635.6 5th@1900 2	215,634	532,662 71.2%	748,296	1,009,557	0.293	18.4%	23.8%	62.7%	741	5.53	1.62
Oct 12	6,103.6	5,352.8	5,599.6	3,010.0	2,562.5	2,639.8	328,657 34.7%	618,697 65.3%	947,354	1,004,668	0.432	21.3%	43.1%	49.2%	943	6.08	2.63
Sep 12	6,950.4	5,913.6	0.689.9	3,897.9	3,998.0	3,395.4 2nd@1600	420,304	941,005	1,361,309	1,003,527	0.489	26.8%	46.6%	54.9%	1,357	6.93	3.38
Aug 12	7,624.8	6,846.8	7,270.0	4,639.9	4,754.4	3,798.4 8th@1700 2	626,141 35.9%	1,116,697	1,742,838	1,001,586	0.498	31.3%	50.2%	62.9%	1,740	7.61	3.79
Jul 12	7,382.2	6,564.3	7,016.0	4,295.1	4,238.2	3,490.3 10th@1700	594,612 34.7%	1,119,459 65.3%	1,714,071	997,467	0.473	31.8%	54.7%	%67.3%	1,718	7.40	3.50
Jun 12	7,365.7	6,606.1	6,951.9	4,235.6	4,167.0	3,496.7 27th@1700 1	533,238	955,988 64.2%	1,489,226	998,870	0.475	27.7%	48.2%	58.3%	1,491	7:37	3.50
May 12	6,689.8	5,909.0	6,186.3	3,487.5	3,341.2	2,913.2 31st@1700 2	400,080	675,579 62.8%	1,075,659	996'666	0.435	22.0%	42.3%	20.6%	1,076	69.9	2.91
Apr 12	6,286.7	5,112.0	6,018.8	2,610.7	3,162.1	2,723.4 22nd@1700 3	230,390	536,879	767,269	1,005,133	hours per mon 0.433	16.7%	33.2%	38.6%	763	6.25	2.71
Mar 12	5,914.9	4,623.9	5,667.8	1,710.5	2,048.0	1,642.3 8th@0800 22	213,662	564,286 72.5%	777,948	1,008,481	All load factors are calculated based on 730 hours per month. 0.327 0.312 0.278 0.433	18.0%	52.0%	64.9%	771	5.87	1.63
Feb 12	5,759.3	4,469.7	5,524.0	1,757.5	2,168.6	1,797.4 15th@0800	207,687	558,950 72.9%	766,637	1,006,728	are calculated 0.312	18.2%	48.4%	58.4%	762	5.72	1.79
Jan 12	6,124.2	4,783.5	5,886.4	1,876.0	2,357.7	2,003.2 13th@0800	267,639	740,706 73.5%	1,008,345	1,007,536	All load factors 0.327	22.6%	28.6%	%0'69	1,001	80'9	1.99
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak Weighted	Off-Peak Weighted	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

*** General Service E-20 ***

SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)	ion Ind Max by Season 20.2	20.1 ss Peak by Season 7.3	27.1 16.4 27.1 27.1	Energy Summation by Season 9,467 4,801 14,268 35.8% 31.1% 34.0% 17,008 10,639 27,647 64.2% 68.3% 66.0%	15,440 rr Averages by Season 403		asonal
Jan 12 Apr 12 May 12 Jun 12 Jul 12 Aug 12 Sep 12 Oct 12 Nov 12 Dec 12	15.0 14.3 14.6 20.2 21.7 24.6 27.1 32.6 26.8 20.1 15.4	11.8	4.8 3.7 str@1700 str@1900 20th@00	756 823 30.6% 31.3% 1,714 1,806 69.4% 68.7%	CUSTOMERS 4,683 5,752 4,539 3,799 2,664 2,537 Monthly Count 410 404 410 404 410 404 405 465 462 409 404 383	FACTORS All load factors are calculated based on 730 hours per month. Coincident Factor (CP) 0.266 0.238 0.205 0.245 0.276 0.199 0.243 0.239 0.240 0.218 Load Factor (Nax) % 22.5% 23.7% 24.7% 18.1% 23.8% 21.9% 23.7% 24.2% 25.8% 23.7% 22.3% Load Factor (NCP) % 32.7% 34.9% 37.0% 22.4% 29.9% 27.1% 29.1% 27.3% 34.5% 30.8% 33.1% Load Factor (CP) % 84.5% 99.5% 120.0% 61.1% 97.3% 118.8% 99.7% 99.6% 100.0% 61.1% 97.3% 118.8% 99.7% 99.6% 100.0% 61.1% 97.3% 118.8% 99.7% 99.6% 100.0% 61.1% 97.3% 118.8% 99.7% 99.6% 100.0% 61.1% 97.3% 118.8% 99.7% 99.6% 100.0% 61.1% 97.3% 118.8% 99.7% 99.5% 100.0% 61.1% 60.5% 100.0%	6,594 38.10

*** General Service E-221 ***

12,321 13,281 15,222 20,949 26,176 26,176 26,376 27,776 21,394 21,395 2	26.3% 24.4% 24.9% 23.1% 30.1% 26.217 29.603 27.299 27,115 18.348 21.995 1 73.7% 74.7% 75.6% 27,115 76.9% 69.9% 1 35,573 39,629 36,110 36,105 23,859 31,466 2 1,480 1,415 1,434 1,502 1,355 1,362 1,362 2,681 0.223 0.194 0.212 0.231 0.256 6 31.5% 33.0% 36.7% 30.3% 25.4% 30.0% 2 22.6% 58.8% 63.1% 143.4% 109.7% 117.1% 9 24,036 28,006 25.181 24,038 17,608 23,103 18
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On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

Load Research Cost of Service Data Test Year Ended December 31, 2012

*** General Service SCHOOL TOU ***

SUMMATION IND MAX (MW)	Hk				May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12 Dec 12	12	SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)
_	9.6	6:9	6.7	5.6	5.9	4.3	4.8	6.8	6.9	5.8	5.6	7.0	Summation Ind Max by Season 6.9 7.0
	4.0	5.2	5.2	5.5	5.9	4 1	4.7	6.8	6.8	5.8	5.0		2: 4
	5.5	6:9	9.9	5.4	5.8	4.1	4.6	9.6	6.7	5.7	5.4	69	6.7 6.9 6.9
	3.7	5.0	4.8	5.1	5.4	35	43	0.00	i.				Class Peak by Season
	5.1	6.3	5.9	5.1	5.4	3.4	4.1	6.3	6.9	5.4	4.5	2.0	
		6.0	5.2	9.	3.0	u o	10	ļ				-	Coincident Peak by Season
13th@0800	_	15th@0800 8th	8th@0800 22n	22nd@1700 31	31st@1700 27	<u> </u>	<u> </u>	8th@1700 2nc	2.5 2nd@1600 1s	4.2 1st@1700 5tt	2.9 5.9 5th@1900 20th@0800	5.9	6.0 6.0
l m	390 35.5%	688 37.8%	681 38.8%	683 43.2%	910	660 37.6%	526 38.2%	907	848 40.3%	866	753	614	Summa
	709 64.5%	1,132 62.2%	1,075	898	1,116	1,096	852 61.8%	1,247	1,255	1,063		1,172	
	1,099	1,820	1,756	1,581	2,026	1,756	1,378	2,154	2,103	1,929		1,786	61.3%
	12	17	17	11	17	11	17	17	121	17	17	[-	er Averages by Season
All load	d factors are c	alculated ba	sed on 730 hr 0.777	All load factors are calculated based on 730 hours per month. 0.842	0.508	0.823	0 710	Coq]	easonal Fac
27	27.0% 3	36.1%	35.9%	38.8%	47.0%	26.5%	39.4%	43.3%	42.0%	45.3%	0.516 0. 43.8% 35	0.847	
29		39.6%	40.7%	42.2%	51.5%	67.8%	43.7%	46.5%	44.2%	47.5%		38.8%	39.8% 35.6% 37.1%
32	32.0% 4	41.6%	46.3%	135.4%	92.5%	68.7%	55.5%	62.8%	115.2%	62.9%	84.9% 41.	41.5%	38.1%
91,			103,294		119,176	103,294	81,059	126,706	123,706	113,471	105,706 105,059		asonal Averages 100,950
391	391.67 35	352.94	393.88	328.49	347.70 176.47	250.24	200.00	401.26	403.65	342.95	330.70 409.64 170.59 347.06	26 8 8	337.93 388.97 363.45 208.62 277.04 242.93
			JOT	TOU Periods - All Months:	1 1	On-Peak 11 am 9pm, M-F	Off-Peak 9 pm - 11 an	Off-Peak 9 pm - 11 am, M-F.& All Weekends	ekends				

Off-Peak 9 pm - 11 am, M-F & All Weekends

On-Peak 11 am 9 pm, M-F

TOU Periods - All Months:

sde (

Load Research Cost of Service Data Test Year Ended December 31, 2012

*** General Service E-32 *** 0-20 kW

	ANNUAL	Season 833.9	764 1	783.5	l i	468.6	1 11	ason 563,938 38.4%	902,776	1,466,714	ason 101,321	0.372	20.1%	32.8%	25.9%	1000	269	2.54
	WINTER (Nov-Apr)	Summation Ind Max by Se 833.9 817.8	700.8	771.2	Class Peak by Season	367.8	Coincident Peak by Season 309.9 238.0	Energy Summation by Season 815,174 248,764 5 41.1% 35.5%	451,431 64 5%	700,195	Customer Averages by Season 99,339 103,303 1	Seasonal Factors	19.5%	42.6%	68.2%	Seasonal Averages	7 22	2.18
	SUMMER (May-Oct) (I	Summation 833.9	764.1	783.5	Class P.	468.6	Coincident 309.9	Energy Sum 315,174 41.1%	451,345	766,519	Customer Av	Seaso 0.372	21.0%	34.3%	58.4%	Season	8 04	2.90
	Dec 12	817.8	700.8	771.2	349.8	367.8	234.3 20th@0800	40,564 32.4%	84,634	125,198	104,271	0.287	21.0%	46.6%	73.2%	1 201	7 84	2.25
	Nov 12	749.2	681.3	658.2	374.9	312.8	219.5 5th@1900 201	43,571 38.5%	69,600	113,171	102,945	0.293	20.7%	41.3%	70.6%	1.099	7.28	2.13
	Oct 12	765.4	721.0	675.7	449.9	388.2	285.7 1st@1700 5t	50,962	69,516 57.7%	120,478	100,625	0.373	21.6%	36.7%	27.8%	1.197	7.61	2.84
	Sep 12	833.9	720.1	783.5	471.7	407.8	218.4 2nd@1600 1s	44,981	72,770	117,751	98,791	0.262	19.3%	34.2%	73.9%	1,192	8.44	2.21
	Aug 12	816.3	764.1	758.9	510.8	463.1	307.6 8th@1700 2r	59,176 41.7%	82,734 58.3%	141,910	860'86	0.377	23.8%	38.1%	63.2%	1,447	8.32	3.14
0-20 KW	Jul 12	797.2	756.9	732.5	488.8	454.4	299.7 10th@1700 8	49,279	73,611	122,890	98,276	0.376	21.1%	34.4%	56.2%	1,250	8.11	3.05
	Jun 12	823.4	762.1	749.3	506.8	468.6	309.9 27th@1700	53,951 40.7%	78,607	132,558	99,507	0.376	22.1%	35.8%	28.6%	1,332	8.28	3.11
	May 12	735.9	698.5	653.6	425.6	374.2		56,824	74,108 56.6%	130,932	100,735	h. 0.420	24.4%	42.1%	28.0%	1,300	7.31	3.07
	Apr 12	707.2	657.5	643.6	368.1	330.4	220.2 309.2 22nd@1700 31st@1700	45,211 38.8%	71,313	116,524	102,639	nours per mont	22.6%	43.4%	72.5%	1,135	68.9	2.15
	Mar 12	765.3	673.6	6.969	314.4	307.9	209.2 8th@0800 22	43,283	76,615 63.9%	119,898	103,842	based on 730 I 0.273	21.5%	52.2%	78.5%	1,155	7:37	2.01
	Feb 12	709.2	607.8	670.5	328.6	339.8	227.1 15th@0800	40,269	76,453 65.5%	116,722	103,478	are calculated 0.320	22.5%	47.1%	70.4%	1,128	6.85	2.19
	Jan 12	734.9	616.0	703.8	325.3	344.9	238.0 13th@0800	35,865	72,817 67.0%	108,682	102,642	All load factors are calculated based on 730 hours per month. 0.324 0.320 0.273 0.311	20.3%	43.2%	62.6%	1,059	7.16	2:32
		(MW)																
		SUMMATION IND MAX (MW) Non-Timed			CLASS PEAK (MW) On-Peak		COINCIDENT (MW) System Time	(MWH)			iens Sount	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	tor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (KW)
	ļ	SUMMA Non-Time	On-Peak	Off-Peak	CLASS P On-Peak	Off-Peak	COINCIDI System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident	Load Fact	Load Fact	Load Factor (CP) %	CUSTOMI Energy Us	Ind. Max D	Coincident

*** General Service E-32 *** 21-100 kW

SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)	Summation Ind Max by Season	3.000		7.52.7	Class Peak by Season	320.2	1	415.5 224.3 415.5		Seaso	38.4% 35.3% 942,259	2/200	934,788 659,962 1,594,750	1 000 EGE	Customer Average by Conces	19,257 14,969 17,113	Ť		60t-0	42.5%	64.7%	83.3% 112.1% 69.7%	asonal	13,115 11,358 12,236	39.52 31.08 35.30	13.57	
12 Dec 12	486.4 462.8				310.3			낡	900 20th @ 0800		37.4% 32.5%	$\ \ $	113,053 123,027 62.6% 67.5%			15,817 14,859		0.461	50.9% 53.9%			110.3% 120.2%		11,418 12,266	30.75 31.15	14.18 13.98	
Oct 12 Nov 12	651.8				462.1	409.0		335.6	1st@1700 5th@1900	89.8901			134,534 113 60.0% 63			18,266 15		0.515	47.1% 50			01.1 %c.18	-	12,2/6 11,	35.69	18.37	
Sep 12	778.4	727.9	741.4		550.6	508.7		303.7	-{	86 748	35.6%	00000	64.4%	243,674		20,067		0.390	42.9%	80.6%	100 00/	0.50	10 140	12,143	38.79	15.13	
Aug 12	827.7	802.2	774.4		618.0	573.6		402.7 Rth@1700	-{	117.291	39.0%	100 455	61.0%	300,746		20,234		0.487	49.8%	96.7%	100 3%	0.0.	14 863	2000;	40.91	19.90	
Jul 12	837.4	805.7	792.2		605.5	570.0		415.5 10th@1700	4	96,455	37.3%	162 130	62.7%	258,593		20,237		0.496	42.3%	58.5%	85.3%		12 778	21,112	41.38	20.53	
Jun 12	802.6	776.2	749.4		589.3	543.9		402.6 27th@1700 1		97,032	37.9%	158 989	62.1%	256,021		19,162		0.502	43.7%	29.5%	87.1%		13.361		41.88	21.01	
May 12	676.6	643.7	614.8		475.0	418.7		356.1 31st@1700 2	-	94,440	40.5%	138 746	29.5%	233,186	 	17,575	£	0.526	47.2%	67.2%	89.7%		13.268		38.50	20.26	
Apr 12	548.2	522.2	508.6		360.3	320.2		221.6 22nd@1700 3		67,857	37.1%	115,046	62.9%	182,903	47.014	15,654	All load factors are calculated based on 730 hours par month	0.404	45.7%	69.5%	113.1%		11,684		35.02	14.16	
Mar 12	442.0	406.9	421.0		264.1	243.1		177.6 8th@0800 22		59,226	35.9%	105,749	64.1%	164,975	14 204	14,304	based on 730	0.402	51.1%	85.6%	127.2%		11,533		30.90	12.42	
Feb 12	414.2	379.4	398.9		241.3	239.7		15th@0800		54,539	35.1%	100,843	64.9%	155,382	14 974	1,77,1	are calculated	0.449	51.4%	88.2%	114.4%		10,888		29.03	13.03	
Jan 12	442.3	394.4	425.1	Γ-	251.9	253.4		13th@0800		52,203	33.8%	102,244	%2'99	154,447	14 9121	310,171	All load factors	0.460	47.8%	83.5%	104.1%		10,357		29.66	13.63	
SUMMATION IND MAX AMAS	Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW)	On-Peak	Off-Peak	COINCIDENT (MW)	Time	ENERGY (MWH)	On-Peak	Q	Off-Peak	%	Total	Monthly Count		FACTORS	Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	C ISTOMED AVEDAGES	Energy Use (kWh)	Mer. P.	III'd. Max Demand (KW)	Coincident Demand (kW)	

TOU Periods - All Months: On-Peak Off-Peak 11 am, M-F.& All Weekends

*** General Service E-32 *** 0- 100 kW

ANNUAL	son 1,644.0	1,566.3	1,533.3	1,113.2	1,028.3	715.2	30n 1,506,197 37.6%	2,497,526 62.4%	4,003,723	son 118,434	0.435	27.8%	41.1%	63.9%	2,817	11.70	4.58	
WINTER A	Summation ind Max by Season 1,644.0 1,280.6	1,179.7	1,218.9	Class Peak by Season 3.2 724.0	650.7	Coincident Peak by Season 715.2 443.8	Energy Summation by Season 396,830 609,367 1,5 39.3% 35.4%	1,111,393 64.6%	1,720,760	Customer Averages by Season 118,595 118,272	Seasonal Factors	30.7%	54.3%	88.9%	Seasonal Averages	10.26	3.62	
SUMMER W (May-Oct) (N	Summation in 1,644.0	1,566.3	1,533.3	Class Pe 1,113.2	1,028.3	Coincident 715.2	Energy Sumi 896,830 39.3%	1,386,133 60.7%	2,282,963	Customer Av	Seaso 0.435	31.7%	46.8%	72.9%	Seasor 3,209	13.14	5.55	•
Dec 12	1,280.6	1,128.1	1,218.9	606.3	626.5	442.1 20th @ 0800	99,799	207,661 67.5%	307,460	119,130	0.345	32.9%	67.2%	95.3%	2,581	10.75	3.71	
Nov 12	1,235.6	1,139.9	1,108.7	685.2	582.0	443.8 5th@1900 2	111,114 37.8%	182,653 62.2%	293,767	118,762	0.359	32.6%	28.7%	%2'06	2,474	10.40	3.74	
Oct 12	1,417.2	1,347.9	1,266.0	890.7	777.0	621.3 1st@1700	140,652	204,050	344,702	118,891	0.438	33.3%	53.0%	%0.92	2,899	11.92	5.23	
Sep 12	1,612.3	1,448.0	1,524.9	1,018.2	916.6	522.1 2nd@1600	131,729 36.4%	229,696	361,425	118,858	0.324	30.7%	48.6%	94.8%	3,041	13.57	4.39	
Aug 12	1,644.0	1,566.3	1,533.3	1,113.2	1,028.3	710.3 8th@1700 2	176,467 39.9%	266,189	442,656	118,332	0.432	36.9%	54.5%	85.4%	3,741	13.89	00.9	
Jul 12	1,634.6	1,562.7	1,524.7	1,091.0	1,024.5	715.2 10th@1700	145,734	235,749	381,483	118,513	0.438	32:0%	47.9%	73.1%	3,219	13.79	6.03	
Jun 12	1,626.0	1,538.3	1,498.7	1,095.0	1,006.8	712.5 27th@1700 1	150,983 38.9%	237,596	388,579	118,669	0.438	32.7%	48.6%	74.7%	3,274	13.70	6.00	
May 12	1,412.5	1,342.2	1,268.4	899.3	792.9	665.3 31st@1700	151,265	212,853	364,118	118,310	nth. 0.471	35.3%	55.5%	75.0%	3,078	11.94	5.62	
Apr 12	1,255.3	1,179.7	1,152.2	724.0	650.7	441.8 22nd@1700	113,068 37.8%	186,359	299,427	118,293	hours per moi 0.352	32.7%	26.7%	92.8%	2,531	10.61	3.73	
Mar 12	1,207.3	1,080.5	1,117.9	577.1	541.9	386.8 8th@0800 2	102,509	182,364	284,873	118,146	All load factors are calculated based on 730 hours per month. 0.375 0.368 0.320 0.352	32.3%	%9'.29	100.9%	2,411	10.22	3.27	
Feb 12	1,123.5	987.3	1,069.4	564.0	575.4	413.1 15th@0800	94,808	177,296	272,104	117,749	s are calculate	33.2%	64.8%	90.2%	2,311	9.54	3.51	
Jan 12	1,177.2	1,010.4	1,128.9	570.4	595.2	441.3 13th@0800	88,068 33.5%	175,061 66.5%	263,129	117,554	All load factor 0.375	30.6%	%9:09	81.7%	2,238	10.01	3.75	
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak Weighted	Off-Peak Weighted	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	[Load Factor (NCP) %	Load Factor (CP) %	GUSTOMER AVERAGES Energy Use (KWN)	Ind. Max Demand (kW)	Coincident Demand (kW)	

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** General Service E-32 *** 101-400 kW

ANNUAL	son 944.8	929.6	896.9	772.6	730.8	on 572.4	son 1,185,595 36.6%	2,049,792 63.4%	3,235,387	son 4,281	0.606	39.1%	47.8%	72.9%	62,995	180.26	103.46
WINTER /	Ind Max by Season 774.3	749.7	738.3	Class Peak by Season 2.6 604.1	558.8	Coincident Peak by Season 572.4 405.3	Energy Summation by Season 80,426 505,169 1,1 37.8% 35.2%	929,940 64.8%	1,435,109	Customer Averages by Season 4,268 4,294	Seasonal Factors	42.3%	54.2%	82.2%	Seasonal Averages 15 55,706	162.08	89.58
SUMMER (May-Oct) (Summation 944.8	929.6	896.9	Class P 772.6	730.8	Coinciden 572.4	Energy Sun 680,426 37.8%	1,119,852 62.2%	1,800,278	Customer A 4,268	Seas 0.606	43.5%	53.2%	81.1%	Seaso 70,285	198.45	117.35
Dec 12	675.1	633.5	654.0	478.8	472.8	398.4 20th @ 0800	81,646	170,347 67.6%	251,993	4,273	0.590	51.1%	72.1%	%9.98	58,970	157.98	93.23
Nov 12	6.669	682.6	658.3	538.8	487.4	394.1 5th@1900 20	90,303	153,102 62.9%	243,405	4,299	0.563	47.6%	61.9%	84.6%	56,620	162.81	91.67
Oct 12	794.3	779.9	734.9	6:869	589.3	492.4 1st@1700 5	109,156 39.4%	167,890 60.6%	277,046	4,292	0.620	47.8%	59.4%	77.1%	64,549	185.06	114.72
Sep 12	850.7	824.9	816.3	0:289	622.9	406.1 2nd@1600 1	101,046 35.5%	183,590 64.5%	284,636	4,270	0.477	45.8%	26.8%	%0.96	69,659	199.21	95.10
Aug 12	944.8	929.6	6.968	772.6	730.8	572.4 8th@1700 2	132,297 38.7%	209,555	341,852	4,314	909:0	49.6%	%9:09	81.8%	79,242	219.01	132.68
Jul 12	838.8	819.1	802.1	658.3	634.4	506.8 10th@1700	105,604 36.4%	184,518 63.6%	290,122	4,232	0.604	47.4%	60.4%	78.4%	68,547	198.18	119.74
Jun 12	834.6	808.8	788.9	663.7	628.2	514.5 27th@1700	111,776 36.8%	191,964 63.2%	303,740	4,226	0.616	49.9%	62.7%	%6:08	71,880	197.50	121.76
May 12	819.9	810.2	760.2	658.3	8.909	513.4 31st@1700 2	120,547 39.8%	182,335 60.2%	302,882	4,276	m. 0.626	20.6%	63.0%	80.8%	70,833	191.75	120.07
Apr 12	774.3	749.7	738.3	604.1	558.8	360.1 22nd@1700 3	95,058 36.9%	162,553 63.1%	257,611	4,282	hours per mon 0.465	45.6%	58.4%	%0'86	60,156	180.80	84.09
Mar 12	692.7	658.0	667.2	506.1	475.6	362.9 8th@0800 22	86,827 35.6%	157,070 64.4%	243,897	4,297	based on 730 0.524	48.2%	%0'99	92.1%	56,765	161.23	84.46
Feb 12	658.3	616.4	639.9	459.0	466.0	386.8 15th@0800	81,404	150,517 64.9%	231,921	4,349	All load factors are calculated based on 730 hours per month. 0.601 0.588 0.524 0.465	48.3%	%2'89	82.1%	53,323	151.35	88.93
Jan 12	674.7	615.5	658.0	465.4	489.2	405.3 13th@0800	69,930 33.9%	136,352 66.1%	206,282	4,262	All load factors	41.9%	27.8%	%2'69	48,401	158.31	95.10
	D MAX (MW)			IW)							r (CP)	% (>	% (d	%	ERAGES	1 (kW)	nd (kW)
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (KWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** General Service E-32 *** 401-999 kW

ANNUAL	eason 549.4	2 4 5	534.7		446.5	1 11	778,410	1,464,635	2,243,045	ason 833	0.687	46.6%	EE 70/	76.7%	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	527, 130	372.62
WINTER (Nov-Apr)	Summation Ind Max by Season 549.4 482.5	1604	467.91	Class Peak by Season	381.8	Colncident Peak by Season 377.6 302.9	Energy Summation by Season [20,826] 357,584 7 35,3%,34.1%	692,224	1,049,808	Customer Averages by Season 814	Seasonal Factors	49.7%	50 7%	%8.68	Seasonal Averages	524 8Q	331.60
SUMMER (May-Oct)	Summation 549.4	5403	534.7	Class P	446.5	Colnciden 377.6	Energy Sum 420,826 35.3%	772,411	1,193,237	Customer Av	Seasc 0.687	49.6%	265	81.6%	Seasor 244 Do81	621.20	413.64
Dec 12	426.2	401.7	414.6	330.9	319.4	267.0 20th@0800	56,639	123,741	180,380	820	0.626	58.0%	74.7%	92.5%	219.963	519.74	325.59
Nov 12	446.8	437.9	430.5	366.0	345.0	302.9 5th@1900	1 	114,470	176,924	837	0.678	54.2%	96.2%	80:0%	211.420	533.90	361.96
Oct 12	478.7	473.1	452.6	394.5	372.6	331.3 1st@1700		119,515	188,510	808	0.692	53.9%	65.5%	77.9%	233,172	592.10	409.79
Sep 12	509.3	497.1	498.1	433.9	422.4	274.8 2nd@1600	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	122,800	182,466	809	0.540	49.1%	22.6%	91.0%	225,467	629.27	339.56
Aug 12	549.4	540.3	534.7	459.9	446.5	377.6 8th@1700 2	79,667	142,248	221,915	832	0.687	55.3%	66.1%	80.5%	266,725	660.31	453.85
Jul 12	498.5	489.5	486.0	417.1	408.9	333.8 10th@1700	63,397	121,435	184,832	789	0.670	20.8%	%2.09	75.9%	234,171	631.55	422.90
Jun 12	502.5	489.5	485.7	418.0	403.1	350.8 27th@1700 10	70,006	131,740	201,746	908	0.698	25.0%	66.1%	78.8%	250,434	623.78	435.46
May 12	496.5	489.9	474.0	419.4	401.8	353.6 31st@1700 2	79,094	134,674	213,768	841	n. 0.712	%0.69	%8.69	82.8%	254,080	590.18	420.28
Apr 12	482.5	469.1	467.9	401.3	381.8	270.6 22nd@1700 3	63,441	119,915 65.4%	183,356	852	hours per mont 0.561	52.1%	62.6%	92.8%	215,269	566.52	317.70
Mar 12	458.8	442.1	445.8	357.8	346.3	278.5 8th@0800 22	62,228 34.5%	118,143 65.5%	180,371	298	0.607	23.9%	69.1%	88.7%	208,073	529.30	321.27
Feb 12	427.8	409.7	417.3	333.3	324.3	283.0 15th@0800	58,992	110,524 65.2%	169,516	858	are calculated 0.661	54.3%	%2.69	82.1%	197,614	498.73	329.91
Jan 12	442.3	420.8	432.0	341.7	335.9	294.0 13th@0800	53,830	105,431	159,261	882	All load factors are calculated based on 730 hours per month. 0.665 0.661 0.607 0.561	49.3%	63.8%	74.2%	180,466	501.15	333.15
!	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (KWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

TOU Periods TOU Periods - All Months:



*** General Service E-32 *** 1001+ kW

Load Research Cost of Service Data Test Year Ended December 31, 2012

ANNUAL	ason 270.8	263.2	264.1	230.9	224.9	on 220.4	452,026 34.0%	877,888	56.0% 1,329,914	147	0.814	56.1%	65.8%	71.6%	749,829	1,310.07	1,006.47
WINTER (Nov-Apr)	Summation Ind Max by Season 270.8 195.1	190.6	189.5	Class Peak by Season 0.9 166.9	161.1	Coincident Peak by Season	Energy Summation by Season 157,601 194,425 4 34.3% 33.6%	385,035	579,460	Customer Averages by Season 164 130	Seasonal Factors	67.8%	79.3%	118.9%	Seasonal Averages 0 738,198	1,190.80	880.03
SUMMER (May-Oct)	Summation 270.8	263.2	264.1	Class P 230.9	224.9	Coincident 220.4	Energy Sum 257,601 34.3%	492,853	750,454	Customer Av	Seasc 0.814	63.3%	74.2%	80.8%	Seasor 761,460	1,429.33	1,132.90
Dec 12	144.4	140.4	139.9	119.0	115.2	111.3 20th@0800	32,016	69,945	101,961	126	0.771	%2'96	117.4%	125.5%	809,170	1,146.13	883.28
Nov 12	164.3	162.1	158.4	139.5	134.0	120.6 5th@1900 20	34,412	64,190	98,602	136	0.734	82.2%	%8.96	112.0%	727,602	1,212.35	889.93
Oct 12	193.3	191.0	184.4	165.2	156.7	161.4 1st@1700 5	34,952	62,138	060,76	147	0.835	%8.89	80.5%	82.4%	901,099	1,314.30	1,097.34
Sep 12	258.8	250.6	253.4	224.9	218.8	171.4 2nd@1600	45,817	97,360	143,177	178	0.662	75.8%	87.2%	114.4%	806,630	1,458.07	965.63
Aug 12	270.8	263.2	264.1	530.9	224.9	220.4 8th@1700 2	53,208	97,950	151,158	179	0.814	76.5%	89.7%	93.9%	844,458	1,512.93	1,231.28
Jul 12	262.5	257.5	257.6	220.6	219.4	212.0 10th@1700	42,462	83,537	125,999	178	0.808	65.7%	78.3%	81.4%	708,984	1,477.24	1,192.90
Jun 12	219.2	216.7	212.4	189.9	183.9	187.0 27th@1700	40,165	78,665	118,830	152	0.853	74.3%	85.7%	87.0%	779,411	1,437.88	1,226.54
May 12	204.2	200.9	195.7	171.0	164.7	160.9 31st@1700 2	40,998	73,202	114,200	148	m. 0.788	%9.92	91.5%	97.2%	769,169	1,375.59	1,083.71
Apr 12	195.1	190.6	189.5	166.9	161.1	131.3 22nd@1700 3	41,672	80,533	122,205	150	hours per mon 0.673	82.8%	100.3%	127.5%	816,486	1,303.62	877.25
Mar 12	153.8	150.3	145.8	123.3	118.5	108.4 8th@0800 22	32,146 33.7%	63,242	95,388	127	All load factors are calculated based on 730 hours per month. 0.774 0.790 0.705 0.673	85.0%	106.0%	120.5%	751,355	1,211.53	853.85
Feb 12	137.3	133.5	133.6	111.3	109.7	108.4 15th@0800	30,342	59,161	89,503	123	are calculated 0.790	89.3%	110.2%	113.1%	730,371	1,120.09	884.58
Jan 12	139.1	132.6	135.3	111.0	110.5	13th@0800	23,838	47,963	71,801	121	All load factors	%2'02	88.6%	91.3%	594,203	1,151.08	891.29
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (KW)

*** General Service E-32 *** 401+ kW

Off-Peak 9 pm - 11 am, M-F & All Weekends

On-Peak 11 am 9 pm, M-F

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** Total General Service E-30 & E-32 ***

WINTER ANNUAL	l <u>ē</u> l	2,707.4	2.547.9	ss Peak by Season	1,753.2	eason	Summation by Season 1,666,546 3,922,228 34.8% 36.3%	6,8	10,8	er Averages by Sea 123,549	Seasonal Factors		$\ \ $		ş		20.33 22.87
SUMMER (Mav-Oct)	Summat 3 409 01	3.299.4	3,228.9	Clas	2,422.9	Colnci 1,880.7	Energy 2,255,683	3,771,249 62 6%	6,026,932	Custom: 123,842	S. 0.552	40.4%	53.7%	77.8%	eg.	8,112	25.40
Dec 12	2.526.4	2.303.7	2,427.5	1.505.6	1,506.8	1,218.8 20th@0800	270,100 32.1%	571,694	841,794	124,349	0.482	45.6%	76.5%	94.6%	() ()	0//'0	20.32
Nov 12	2,546.6	2,422.5	2,355.9	1,726.7	1,538.7	1,261.4 5th@1900	298,283	514,415	812,698	124,033	0.495	43.7%	64.5%	88.3%	1033 0	2000	20.33
Oct 12	2,883.5	2,791.9	2,638.0	2,083.6	1,888.9	1,606.4 1st@1700	353,755	553,593 61.0%	907,348	124,138	0.557	43.1%	28.7%	77.4%	1006	00.00	07:07
Sep 12	3,231.0	3,020.7	3,092.8	2,357.4	2,210.8	1,374.4 2nd@1600	338,258	633,446	971,704	124,114	0.425	41.2%	26.5%	%8'96	7 820	50 96	20.07
Aug 12	3,409.0	3,299.4	3,228.9	2,561.7	2,422.9	1,880.7 8th@1700	441,639	715,942	1,157,581	123,657	0.552	46.5%	61.9%	84.3%	98	97.57	10.14
Jul 12	3,234.4	3,128.7	3,070.4	2,385.9	2,287.3	1,767.8 10th@1700	357,198 36.4%	625,238	982,436	123,712	0.547	41.6%	56.4%	76.1%	7.941	26 14	14 201
Jun 12	3,182.3	3,053.3	2,985.7	2,359.1	2,202.6	1,764.8 27th@1700 1	372,930 36.8%	639,965 63.2%	1,012,895	123,853	0.555	43.6%	28.8%	%9'82	8.178	25.69	14.05
May 12	2,933.1	2,843.2	2,698.2	2,144.0	1,965.3	1,693.2 31st@1700 2	391,904 39.4%	603,064	994,968	123,576	n. 0.577	46.5%	%9:E9	80.5%	8.051	23.74	13 70
Apr 12	2,707.2	2,589.1	2,547.9	1,895.2	1,753.2	1,203.8 22nd@1700 3	313,240 36.3%	549,359 63.7%	862,599	123,576	nours per mont 0.445	43.6%	62.3%	98.2%	086'9	21.91	72.6
Mar 12	2,512.6	2,330.9	2,376.8	1,556.5	1,456.5	1,136.6 8th@0800 22	283,710 35.3%	520,819 64.7%	804,529	123,437	based on 730 0.452	43.9%	70.8%	%0'26	6,518	20.36	9.21
Feb 12	2,346.8	2,146.9	2,260.3	1,454.2	1,463.6	1,191.3 15th@0800	265,546 34.8%	497,498 65.2%	763,044	123,078	are calculated 0.508	44.5%	71.4%	87.7%	6,200	19.07	89.6
Jan 12	2,433.3	2,179.3	2,354.2	1,473.2	1,518.2	1,248.3 13th@0800 15	235,666	464,807 66.4%	700,473	122,820	All load factors are calculated based on 730 hours per month. 0.513 0.508 0.452 0.445	39.4%	63.2%	%6.92	5,703	19.81	10.16
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak Weighted	Off-Peak Weighted	COINCIDENT (AW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (KW)



*** General Service E-32TOU *** 0-20 kW

SUMMATION IND MAX (MW)	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12 Dec 12	2	SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)
Non-Timed	6:0	6:0	6.0	6.0	1:0	6.0	1.0	1.5	1.0	1.2	1.1	[0]	Summation Ind Max by Season
On-Peak	0.8	0.8	0.8	6:0	6:0	0.8	6.0	1.4	0	 - -	0,		
Off-Peak	6.0	6:0	6.0	0.0	6.0	6.0	0.9	1.4	1.0		1.0		
CLASS PEAK (MW)							i						1.4 1.1 1.4
On-reak	9:0	9:0	9.0	0.7	0.7	0.7	0.7	1.1	0.8	6:0	0.8	0.7	Class Peak by Season
Off-Peak	0.7	0.7	0.6	0.7	0.7	0.7	0.7	1.1	0.8	0.9	0.8] [:]	
COINCIDENT (MW)	, 6		ļ										
Time		15th@0800 8	0.21 8th@0800 22r	0.3 22nd@1700 31	0.3 31st@1700 27	0.3 27th@1700 10	0.3 10th@1700 8th	0.5 8th@1700 2nc	0.3 2nd@1600 1st	0.4 1st@1700 5th	0.7 0.4 5th@1900 20th@0800	0.0	Coincident Peak by Season 0.5 0.7 0.7
On-Peak	78	92	98	92	109	8	Š	007					Energy Summation by Season
%	24.3%	24.5%	24.4%	25.3%	28.6%	27.4%	26.9%	132 28.6%	74 25.7%	114	94 26.7% 23	83	
Off-Peak %	245 75.7%	285 75.5%	266	272	273	251 72 6%	243	330	213	284			1.596
Total	323	377	3521	I Vac	looc	200	0/1:0/	7 1.470	/4.3%	71.3%		%9.9/	72.2% 75.2% 73.7%
			722	to	305	346	332	462	287	398	352	333	2,207 2,121 4,328
CUSTOMERS Monthly Count	156	159	148	160	,								Clietomer Assessed h. O.
		3		001	140	133	145	214	160	195	197	178	165 166 166 166
FACTORS Coincident Factor (CP)	All load factors are calculated based on 730 hours per month. 0.442 0.325 0.230 0.319	are calculated t 0.325	ased on 730 ho 0.230	ours per month 0.319	0.314	0.332	0.313	0.336	0.286	0.945	-		easonal
Load Factor (Max) %	48.9%	55.9%	55.5%	52.9%	54.8%	52.4%	47.4%	42.5%	37 5%	47.00/		0.416	
Load Factor (NCP) %	%2'.29	76.2%	75.8%	70.4%	74.7%	71.3%	62.5%	57.8%	20.5%	59.9%		20.2%	44.5%
Load Factor (CP) %	110.6%	172.1%	241.1%	166.2%	174.4%	158.0%	151.6%		Ш	136.3%			46.0% 58.8% 45.1% 168.0% 121.1% 46.4.3%
CUSTOMER AVERAGES Energy Use (KWh)	7400	o c]]	0,
Ind May Domand (IAM)	7,0,5	605,2	2,382	2,282	2,625	2,606	2,290	2,162	1,789	2,036	1,788 1,9	1,983	Seasonal Averages 2,199 2,199
Chicago Definant (KWV)	5.82	5.81	5.88	2.90	6.57	6.81	6.62	6.97	6.54	5.93	5.53 5.	5.41	
Component Defriand (KV)	2.57	1.89	1.35	1.88	2.06	2.26	2.07	2.34	1.87	2.05	3.56 2.	2.25	
			700	TOU Periods - All Months.		On-Peak 11 am 9 pm, M-F	Off-Peak 9 pm - 11 an	Off-Peak 9 pm - 11 am, M-F & All Weekends	ekends				

*** General Service E-32TOU *** 21-100 kW

ANNUAL		98son 7.2	6.9	6.9	n 4.9	4.6	3.3	11,800 31.4%	25,764 68.6%	37,564	eason 152	0.459	59.7%	88.1%	158.8%	20,657	40.60	18.52
WINTER	(Nov-Apr)	Summation Ind Max by Season 7.2 6.7	6.1	6.5	Class Peak by Season 4.9	4.2	Coincident Peak by Season	Energy Summation by Season 6,474 5,327 32.3% 30.4%	12,182 69.6%	17,509	Customer Averages by Season 153	Seasonal Factors	59.5%	93.6%	173.8%	Seasonal Averages	38.24	17.70
SUMMER I W	Н	Summation I	6.9	6.9	Class Pe	4.6	Coincident	Energy Sum 6,474 32.3%	13,581 67.7%	20,055	Customer Av	Seasc 0.459	63.7%	94.0%	169.6%	Season 21,980	42.97	19.34
_	12	4.7	4.3	4.5	3.1	3.1	2.3	792 27.8%	2,057 72.2%	2,849	135	0.492	83.5%	124.4%	169.7%	21,103	34.62	17.04
	Nov 12 Dec 12	5.3	4.9	5.1	3.4	3.3	3.1 2.3 5th@1900 20th@0800	908 31.5%	1,973 68.5%	2,881	143	0.583	74.3%	116.8%	127.3%	20,086	37.04	21.61
	Oct 12 Nov	6.0	5.7	5.6	4.1	3.8	2.7 1st@1700 5th@	1,051	2,123 66.9%	3,174	153	0.453	72.9%	106.8%	161.0%	20,744	38.99	17.65
	Sep 12 Oc	9.9	5.9	6.5	4.3	4.4	2.8 2nd@1600 1st@	893 29.7%	2,115 70.3%	3,008	154	0.426	62.7%	94.1%	147.2%	19,477	42.57	18.13
	Aug 12 Se	6.9	6.4	6.7	4.9	4.6	3.1 8th@1700 2nd	1,196	2,416 66.9%	3,612	156	0.448	71.4%	101.6%	159.6%	23,170	44.43	19.89
21-100 kW	Jul 12 Au	6.0	5.6	5.8	4.1	4.0	2.7 10th@1700 8th	1,049	2,270 68.4%	3,319	137	0.449	75.5%	110.3%	168.4%	24,224	43.94	19.71
-12	Jun 12 Ju	9:9	6.2	6.4	4.7	4.6	3.1 27th@1700 10th	1,130	2,423 68.2%	3,553	150	0.467	73.3%	103.9%	157.0%	23,764	44.40	20.73
	May 12 Ju	7.2	6.9	6.9	4.5	4.4	3.3 31st@1700 27th	1,156	2,233	3,389	165	0.459	64.6%	102.7%	140.7%	20,502	43.47	19.96
	Apr 12 Ma	6.5	6.0	6.5	4.1	4.0	2.8 22nd@1700 31st	1,000	2,146 68.2%	3,146	155	urs per month. 0.428	%0.99	104.8%	153.9%	20,350	42.27	18.11
	Mar 12 A	6.1	5.6	6.0	4.0	3.8	2.3 8th@0800 22nd	937	2,116 69.3%	3,053	155	0.379	%6.89	105.1%	181.8%	19,732	39.24	14.86
	Feb 12 M	5.5	5.1	5.4	3.5	3.3	2.3 15th@0800 8th	779 30.6%	1,766	2,545	145	re calculated ba	62.9%	100.9%	151.6%	17,519	38.14	15.83
	Jan 12 F	6.7	6.1	6.5	4.3	4.2	3.3 13th@0800 15tf	911	2,125	3,035	176	All load factors are calculated based on 730 hours per month. 0.491 0.415 0.379 0.428	61.9%	97.4%	126.0%	17,215	38.11	18.72
)		(A)					13#					Ā						
		SUMMATION IND MAX (MW) Non-Timed			K (MW)		T (MW)	WH)			15 JE	actor (CP)	(Max) %	(NCP) %	(CP) %	CUSTOMER AVERAGES Energy Use (kWh)	nand (kW)	emand (kW)
		SUMMATION Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW)	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER Energy Use (Ind. Max Demand (kW)	Coincident Demand (kW)

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

*** General Service E-32TOU *** 0-100 kW

SUMMER | WINTER | ANNUAL

7.6	6.5	6:9	7.5	1.8	7.5	2.0	8.4	7.6	7.1	8 4	r.	Summation Ind Max by	nd Max by Season	on RA
			2	5	2	2	j	2: /		100	2.5		0.,	†
6.9	5.9	6.4	6:9	7.8	7.1	6.5	7.8	6.9	6.8	5.9	5.2	7.8	6.9	7.8
7.4	6.4	6.8	7.4	7.8	7.3	6.8	8.2	7.5	6.7	6.1	5.5	8.2	7.4	8.2
·												Class Pe	ak by Season	
4.9	4.0	4.5	4.8	5.2	5.3	4.8	5.9	5.1	5.0	4.2	3.7	5.9	4.9	5.9
4.8	4.0	4.4	4.8	5.1	5.3	4.7	5.7	5.1	4.6	4.1	3.8	2.7	4.8	5.7
3.7 13th@0800 15th@0	ш						اجا	\vdash	 		2.7 0th@0800	Coincident 3.6	Peak by Seaso 3.8	3.8
989	871 29.8%	1,023	1,093	1,265	1,225	1,138	1,328	967	1,165	1,001	875 27.3%	Energy Sum: 7,087	mation by Seas 5,852 29.8%	on 12,939 30.9%
2,369 270.5% 70	2,051	2,382	2,417	2,506	2,674	2,513	2,746	2,328	2,407	2,232	2,327	15,175	13,778	28,953
	2,922	3,405	3,510	3,771	3,899	3,651	4,074	3,295	3,572	3,233	3,202	22,262	19,630	41,892
332	304	303	314	311	585	282	370	315	348	340	313	Customer Av	rerages by Seas	on 318
ad factors are ca	alculated bas	sed on 730 h 0.360	ours per monti 0.415	h. 0.442	0.451	0.430	0.428	0.407	0.435	0.594	0.479	Seaso 0.428	onal Factors 0.498	0.428
9 %5.09	31.9%	67.2%	64.3%	63.5%	70.8%	71.7%	%8'99	29.5%	%2'89	69.2%	77.8%	60.4%	58.8%	26.8%
94.7% 94	H	103.7%	100.5%	%0.66	100.8%	103.3%	94.6%	88.0%	98.3%	106.2%	115.8%	86.1%	92.3%	81.1%
124.3% 15.		186.6%	155.1%	143.5%	157.1%	166.7%	155.0%	145.6%	157.8%	116.5%	162.5%	169.4%	166.0%	159.4%
10,120		11,256	11,174	12,133	13,812	12,948	11,022	10,464	10,251	9,501	10,229	Season 11,772	nal Averages 10,313	11,043
22.98	21.24	22.94	23.80	26.19	26.72	24.75	22.77	24.21	20.45	18.81	18.01	24.18	21.30	22.74
11.15	8.54	8.26	9.87	11.58	12.04	10.64	9.74	9.84	8.90	11.17	8.63	10.46	9.60	10.03
	15t	4.0 4.0 4.0 15th @ 0800 8th @ 15th @ 0800 8th @ 15th @ 0800 8th @ 15th @ 0.402 154.0%	2.6 2.5 2.8 2.8 2.8 30.0% 2.051 2.382 30.0% 2.928 30.0% 2.922 3.405 2.922 3.405 2.924 2.924 103.7% 2.924 2.94 8.54 8.54 8.26	2.6 2.5 3.1 1.093 1.005 29.8% 30.0% 68.9% 31.1% 67.2% 70.0% 68.9% 31.1% 2.922 3.405 3.510 3.510 3.61 9.9% 10.3% 10.5% 61.3% 61.3% 67.2% 64.3% 10.5% 15.1% 67.2% 10.5% 10	4.0 4.5 4.8 5.1 4.0 4.4 4.8 5.1 2.6 2.5 3.1 3.6 15th @ 0800 8th @ 0800 22nd @ 1700 31st@ 1700 2.967 2.362 2.417 2.506 2.922 3.405 31.1% 33.5% 2.922 3.405 3.510 3.771 2.922 3.405 3.510 3.771 0.07 are calculated based on 730 hours per month. 0.402 0.360 0.415 0.442 0.402 0.360 0.415 0.442 0.402 0.360 0.415 0.442 0.402 0.360 0.415 0.442 0.402 0.360 0.415 143.5% 154.0% 186.6% 155.1% 143.5% 2.124 22.34 23.80 26.19 8.54 8.26 9.87 11.58	4.0 4.5 4.8 5.1 5.3 5.3	4.0	4.0 4.5 4.8 5.1 5.3 4.8 5.9 5.9 4.0 4.4 4.8 5.1 5.3 4.8 5.7 5.1 5.3 4.7 5.7 5.2 2.5 3.1 3.6 3.4 3.0 3.6 5.1 5.3 4.7 5.7 5.2 2.5 3.1 3.6 1.285 1.285 1.388 1.388 5.3 1.083 1.285 1.285 1.284 1.328 5.3 2.417 2.506 2.674 2.513 2.748 7.0 2% 7.0 0% 68.9% 66.5% 68.6% 68.8% 67.4% 7.0 2% 3.0 0	4.0 4.5 4.8 5.2 5.3 4.8 5.9 5.1	4.0 4.5 4.8 5.3 4.8 5.9 5.1 5.0 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.6 2.6 2.5 3.1 5.1 5.3 4.7 5.7 5.1 4.6 1 Sin 8 0.90 2.5 3.1 5.3 3.4 3.6 3.4 3.6 3.4 3.1 4.6 3.1 4.6 3.1 4.6 3.1 4.6 3.6 3.4 3.6 3.4 3.6 3.4 3.6<	4.0 4.5 5.1 5.3 4.8 5.9 5.1 5.0 4.2 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.0 4.1 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.0 4.1 2.6 2.6 4.4 4.8 5.1 5.3 4.7 5.1 4.0 4.1 2.6 3.4 4.0 3.4	4.0 4.5 4.8 5.1 5.3 4.8 5.5 5.3 4.9 5.7 5.1 4.6 4.1 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.6 4.1 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.6 4.1 4.0 4.4 4.8 5.1 5.3 4.7 5.3 4.7 5.7 5.1 4.6 4.1 4.0 4.4 4.8 5.1 5.3 4.7 5.3 4.7 5.7 5.1 4.6 4.1 4.0 4.4 4.8 5.1 5.3	4.0 4.4 4.8 5.2 5.3 4.7 5.7 5.1 4.6 4.1 3.8 4.0 4.4 4.8 5.1 5.3 4.7 5.7 5.1 4.6 4.1 3.8 2.6 2.6 2.6 3.1 3.6 5.1 5.3 4.7 5.7 5.1 4.6 4.1 3.8 1.5me 0.800 2.6 3.1 3.5 3.1 3.6 3.1 3.6 4.1 3.8 2.7 2.96 3.00% 3.1.% 3.35% 1.226 1.138 3.746 2.328 2.407 2.736 2.736 2.96 3.00% 3.1.% 3.55% 3.6% 3.6% 2.94% 3.6% 3.277 3.289 3.6% 3.746 2.328 2.407 2.238 2.407 2.236 2.276 2.026 3.1.% 3.771 3.899 3.651 4.074 3.296 3.572 3.237 3.202 2.027 3.	4.0 4.5 4.6 5.1 5.3 4.6 5.9 5.1 5.0 4.2 3.5 4.6 5.9 5.1 5.0 4.2 3.5 4.5

Off-Peak 9 pm - 11 am, M-F & All Weekends

On-Peak 11 am 9 pm, M-F

*** General Service E-32TOU *** 101-400 kW

SUMMER | WINTER | ANNUAL

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends



*** General Service E-32TOU *** 401-999 kW

SUMMATION IND MAX (MW)	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12 Dec	Dec 12	SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)
Non-Timed	26.5	21.1	20.9	23.8	23.3	20.9	23.3	24.9	21.1	20.0	19.7	18.4	Summation Ind Max by Season
On-Peak	24.3	19.6	19.6	22.7	22.3	19.5	21.9	23.1	19.6	18.6	18 3	120	
Off-Peak	25.8	20.8	20.4	23.1	22.5	20.3	22.9	24.4	20.8	19.4	19.1	181	
CLASS PEAK (MW) On-Peak	14.1	12	ţ	6									25.8 25.8
# Dave # C	1.14	0.7	17.71	20.8	20.6	17.7	19.8	21.7	18.2	16.8	15.8	14.4	21.7 21.7 21.7
Unreak	20.8	16.9	17.3	20.5	20.2	17.5	19.8	21.6	18.5	17.0	15.6	14.7	21.6 20.8 21.6
CIDENT (MW)		12.9	12.0	11.3	1. 7.7.	4+ 14-	i c	0					nosea
	13th@0800 15				, ,		10th@1700 8	15.0 8th@1700 2n	9.4 2nd@1600 1s	13.1 1st@1700 5th	13.2 11.1 5th@1900 20th@0800	- - - - - - - - - - - - - - - - - - -	16.0 15.7 16.0
ENERGY (MWH)	0000	1000	1,000								1]	
%	32.6%	33.4%	33.4%	33.8%	3,779	33.6%	33.2%	3,715	2,439	3,095	3,089	2,868	Summation by Season 18,304
Off-Peak	5,958	5.754	6.450	6 552	8 975	000						% %	33.3% 32.6% 33.3%
%	67.4%	%9.99	%9.99	66.2%	64.4%	66.4%	5,842	7,021	5,327	5,980	6,387	6,661	37,761
Total	8,840	8,639	9,684	9,897	10,614	9,041	8,746	10,736	7.766	9 075		08.80	67.4%
										500		87C'S	55,978 56,065 112,043
Monthly Count	41	37	36	37	35	59	31	33	59	36	37	E E	Customer Averages by Season
FACTORS	All load factors	are calculated I	1062 ao posei	***************************************								3]	34
Coincident Factor (CP)	0.592 0.612 0.573 0.475	0.612	0.573	0.475	0.665	0.556	0.537	0.644	0.445	0.654	0.672	0.604	Seasonal Factors
Load Factor (Max) %	45.7%	56.1%	63.4%	26.9%	62.4%	59.3%	51.4%	59.2%	50.3%	62.0%	66.0%	71.0%	48.3%
Load Factor (NCP) %	26.7%	%5.69	74.9%	65.2%	70.6%	70.1%	60.4%	%8.79	27.6%	73.3%		88.6%	
Load Factor (CP) %	77.1%	91.7%	110.5%	120.0%	93.8%	106.8%	95.8%	91.9%	113.2%	94.9%		117.6%	115.3%
CUSTOMER AVERAGES]	200
Lifetgy Ose (KWI)	217,687	236,259	271,215	264,498	306,378	316,950	284,165	325,333	267,038	255,370	258,912 288	288,742	Seasonal Averages 292,539 256.219 274.379
Ind. Max Demand (kW)	652.71	576.74	586.10	636.33	672.36	732.05	756.84	753.08	726.87	564.03	537.05 55	557.18	591.02
Coincident Demand (kW)	386.62	352.79	336.08	301.99	447.42	406.66	406.14	484.85	323.22	368.63	360.66	336.35	345.75
			[2	TOUR Bookeds Att 18						ı]	
			2	U renous - All I		On-Peak 11 am 9 pm, M-F	Off-Peak 9 pm - 11 a	Off-Peak 9 pm - 11 am, M-F & All Weekends	eekends				

*** General Service E-32TOU *** 1001+ kW

SHAMATION IND MAY MAND	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12 Dec 12	12	SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)
Non-Timed	21.1	23.2	23.0	30.7	31.4	27.0	24.01	0.00					Summation Ind Max by Season
On-Peak	1 1207					2	0.10	24.3	58.8	23.2	18.8	19.0	34.3 30.7 34.3
	18:51	20.7	20.2	25.6	28.8	24.8	27.7	29.9	24.7	21.4	17.9	15.7	
Off-Peak	20.9	23.0	22.7	30.0	000	000						<u></u>	29.9 25.6 29.9
				200	90.9	26.3	31.5	34.0	28.5	22.5	18.4	18.8	34.0 30.0 34.0
CLASS PEAK (MW)	_												
On-Peak	16.4	17.7	17.3	21.1	23.9	21.9	23.9	25.9	21.4	18.5	. 144	[.	ss Peak by Season
Off-Peak	16.6	18.6	17.9	22.4	26.1	22.5	25.0	02.0		2	1.4.1	13:5	25.9 21.1 25.9
	-					2	0.03	27.3	22.3	18.5	14.2	14.5	27.3 22.4 27.3
COINCIDENT (MW)													
Jystem	14.9 13th@0800	17.2 15th@0800	16.2 8th@0800 22	18.6 22nd@1700 31	21.5 31st@1700 27	21.9 27th@1700 10	21.1	24.3	\vdash	\vdash	-	13.3	Coincident Peak by Season 24.3 18.6 24.3
ENERGY (MWH)							4		Znd@1600 1s	1st@1700 5t	5th@1900 20th@0800	000	ı
On-Peak	3,001	4,443	4,244	4,523	5,911	4.550	5 142	E 240	0230	100			Energy Summation by Season
	30.8%	30.9%	29.9%	29.8%	31.3%	30.5%	30.2%	31.2%	28.4%	3,884	3,134 3	3,176	
Off-Peak	6,742	9:6'6	9,951	10,655	12.974	10.517	11 000]	30.4%
	69.2%	69.1%	70.1%	70.2%	68.7%	%8.69	69.8%	11,5/11 68.8%	9,005	8,329	6,720 8	8,046	64,280 52,050 116,330
Total	9,743	14,379	14,195	15,178	18,885	15,067	17,025	16,819	12.577	12.213		1 1.7%	%8.69
TOWER												_	92,586 74,571 167,157
Monthly Count	16	8	17	18	19	16	19	21	14	4	-	L	er Averages
										2	2		18 16 17
FACTORS Coincident Factor (CP)	All load factors 0.706	are calculated 0.740	based on 730 I 0.703	All load factors are calculated based on 730 hours per month. 0.706 0.706 0.703 0.606	0.684	0.812	0.662	0.708	0 770	000		.	Seasonal Factors
Load Factor (Max) %	63.2%	84.8%	84.4%	67.8%	80 3%	/02 22	100 01		0770	0.903		0.702	0.708 0.606 0.708
Load Eartor (NCB) 9/					200	0,0,0	13.2%	67.2%	29.7%	72.2%	71.8% 81.	81.1%	61.6% 55.5% 55.6%
oracioi (INCF) %	80.5%	106.2%	108.5%	92.7%	%0.66	91.7%	93.3%	84.2%	77.3%	90.3%	94.1% 106.0%	%0	75.0%
Load Factor (CP) %	%9.68	114.5%	120.0%	111.8%	120.3%	94.2%	110.5%	94.8%	82.0%	%6:68	95.7%] 115.6%] <u>L</u>] [8	% 6.5.1
CUSTOMER AVERAGES]	1
gy Use (kWh)	614,804	808,321	841,876	856,338	1,004,178	957,368	902,519	816.878	737 730	772 064	000 001	Į.	asonal Averages
Ind. Max Demand (kW)	1,331.88	1,306.30	1,366.05	1,731.28	1.670.97	1 713 19	П	11				<u></u>	865,324 791,803 828,564
Coincident Demand (kW)	040	0000					╛	1,000.12	1,691.78	1,466.40	1,462.00 1,458.20	[S]	1,649.74 1,442.62 1,546.18
	340.22	966.90	960.79	1,049.41	1,143.23	1,391.54	1,118.54	1,180.22 1,	1,231.81	1,177.66	1,096.49 1,023.02	020	П
			į]	1
			<u>o</u>	TOU Periods - All Months:		On-Peak 11 am 9 pm, M-F	Off-Peak 9 pm - 11 an	Off-Peak 9 pm - 11 am, M-F & All Weekends	ekends	Γ			
]			

*** General Service E-32TOU *** 401+ kW

SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)	Summation Ind Max by Season	59.2	53.0 48.3	58.4 53.1 58.4	Class Peak by Season		1	Coincident Peak by Season 40.3 30.6		Summa	47,274 40,825 88,099 31.8% 31.3% 31.6%		101,290 89,811 191,101		2000	Customer Averages by Season 50 52		easonal Factors	0.562	54.7%		100.9% 122.2% 94.9%	8	417,557	692.42 542.81 617.61
Dec 12	37.9	202	92.0	97.0	27.5	28.7		24.4	ZOITH WORDO		6,044		14,707	20,751		46		6230	2000	/6.1%	99.5%	116.5%	451 084	04400	530.41
Nov 12	38.5	35.5	37.5	0.70	30.1	30.0		27.3	-	0000	6,223		13,107	19,330		49		0.710	20 00	00.9%	88.0%	92.0%	390.832	777	551.98
Oct 12	43.2	40.01	419	2	35.3	35.0		31.7	┙	020	32.8%		14,310	21,288		51		0.734	67 50/	0/C: /O	02.070	95.0%	414,722	841 68	617.56
Sep 12	50.0	44.3	49.3	2	39.3	40.3		30.4 2nd@1600	4	6.040	29.5%		70.5%	20,343		46		0.608	55.8%	701 09	0/ 1.00	%/:16	440,993	1.083.47	659.01
Aug 12	59.2	53.0	58.4		51.1	52.5		40.3 8th@1700 2	-	8 GR2	32.5%	001	18,593	27,555		54		0.681	63.8%	71 9%	/02.00	93.7%	514,188	1,103.88	752.01
Jul 12	55.2	49.5	54.5		42.9	44.4		33.6 10th@1700 8	1	8.045	31.2%	17 705	68.8%	25,771		20		0.609	64.0%	79.5%	105 10	20.1%	519,139	1,111.45	676.85
Jun 12	47.8	44.3	46.6		39.8	39.9		33.5 27th@1700 10		7,588	31.5%	16 5201	68.5%	24,108		44		0.700	%0.69	82.8%	%9 86		544,654	1,080.88	756.84
May 12	54.7	51.1	53.4		44.5	46.1		37.0 31st@1700 27		069'6	32.8%	19 809	67.2%	29,499		53		0.676	73.9%	87.7%	109.2%		551,900	1,023.73	692.24
Apr 12	54.5	48.3	53.1		40.6	42.2		29.9 22nd@1700 31		7,868	31.4%	17.207	%9.89	25,075		22		ours per montr 0.549	63.0%	81.4%	114.9%		454,733	988.28	542.23
Mar 12	44.0	39.8	43.1		34.8	34.8		28.2 8th@0800 22		7,479	31.3%	16,400	68.7%	23,879		53	1000	0.641	74.4%	93.9%	116.0%		454,257	836.28	536.46
Feb 12	44.3	40.3	43.8		34.2	35.1		30.1 15th@0800 8		7,329	31.8%	15,689	68.2%	23,018		24	t best project one	0.679	71.1%	89.7%	104.8%		423,479	815.50	553.77
Jan 12	47.6	42.8	46.7	Г	36.4	36.0		30.6 13th@0800 15		5,883	31.7%	12,700	68.3%	18,583	r	99	All load factors	0.643 0.679 0.641 0.549	53.5%	%0.02	83.2%		329,158	843.35	542.01
SUMMATION IND MAX (MW)	Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW)	On-Peak Weighted	Off-Peak Weighted	COINCIDENT (MW)	Time	ENERGY (MWH)	On-Peak	/0	Off-Peak	%	Total	CUSTOMERS	Monthly Count	FACTORS	Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES	Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

TOU Periods - All Months: On-Peak Off-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

*** Total General Service E-32TOU ***

ANNUAL	son 91.1	814	89.6	70.7	111	n 52.9	on 124,177 31.3%	272,391	396,568	on 446	0.581	49.7%	63.6%	103.6%	693 14	163 09	95.83
WINTER A	Summation Ind Max by Season 91.1	71.7	78.7	Class Peak by Season 0.71 56.91	56.7	Coincident Peak by Season 52.9 42.7	Energy Summation by Season 67,517 56,660 1 31.7% 30.8%	127,167	183,827	rages by Seas 447	Seasonal Factors 0.532	52.3%	73.8%	117.9%	Seasonal Averages	150 K3	88.44
SUMMER W (May-Oct) (No	Summation In 91.1	81.4	89.6	Class Pea	71.1	Coincident F 52.9	Energy Summ 67,517 31.7%	145,224	212,741	Customer Averages by Season 445	Season 0.581	53.3%	68.3%	111.1%	Seasona	175.501	103.23
Dec 12	58.3	50.4	57.5	39.5	42.8	35.6 20th@0800	8,455 28.7%	20,964	29,419	431	0.611	69.2%	94.2%	113.2%	68 254	135.14	82.59
Nov 12	61.6	56.0	60.0	43.6	42.9	39.6 5th@1900 20	9,120	19,519	28,639	471	0.643	63.7%	%0:06	99.1%	60.825	130.84	84.10
Oct 12	2'.29	62.1	65.2	51.9	51.1	42.4 1st@1700 5t	10,251 32.7%	21,096	31,347	478	0.626	63.4%	82.8%	101.3%	65,611	141.74	88.75
Sep 12	75.1	66.2	74.1	56.4	56.7	41.5 2nd@1600 1s	8,687	20,806	29,493	435	0.553	53.8%	71.3%	97.4%	67,765	172.50	95.35
Aug 12	91.1	81.4	9.68	7.07	71.1	52.9 8th@1700 2r	13,134	27,193	40,327	519	0.581	%9.09	77.7%	104.4%	77,656	175.44	101.87
Jul 12	79.7	71.2	78.4	56.9	59.4	43.7 10th@1700 8	11,212 31.1%	24,838	36,050	401	0.548	61.9%	83.2%	113.0%	89,877	198.77	108.95
Jun 12	71.9	0.99	6.69	57.1	57.5	45.0 27th@1700 10	10,905 31.5%	23,766 68.5%	34,671	393	0.626	66.1%	82.6%	105.5%	88,121	182.62	114.37
May 12	80.1	74.9	78.0	59.2	61.1	48.5 31st@1700 2	13,328	27,525 67.4%	40,853	440	0.605	%8'69	91.5%	115.4%	92,749	181.96	110.11
Apr 12	80.3	71.7	78.7	56.9	29.7	42.6 22nd@1700 3	10,901	24,351 69.1%	35,252	450	All load factors are calculated based on 730 hours per month. 0.598 0.599 0.563 0.531	60.1%	84.9%	113.4%	78,338	178.41	94.67
Mar 12	66.4	59.0	65.3	48.6	49.5	37.4 8th@0800 22	10,140	22,516 68.9%	32,656	429	based on 730 0.563	67.4%	%4.06	119.6%	76,039	154.61	87.09
Feb 12	65.7	59.0	64.9	46.8	48.7	39.4 15th@0800	9,863	21,677	31,540	433	are calculated 0.599	65.7%	88.7%	109.7%	72,864	151.83	91.02
Jan 12	71.4	63.4	70.1	49.0	50.9	42.7 13th@0800	8,181 31.1%	18,140 68.9%	26,321	468	All load factors 0.598	20.5%	%6:02	84.4%	56,183	152.34	91.14
	(MW)																
İ	SUMMATION IND MAX (MW)	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak Weighted	Off-Peak Weighted	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

TOU Periods - All Months: On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

*** General Service E-34 ***

ANNUAL		165.6	165.2	159.8	,	149.6	ı	148.9		291.480	32.8%	200	67.2%	889,302	son 31		0.899	61.3%	65.9%	69.4%		2,386,135	4,466.96	3,850.65	
WINTER /	Summation ind Max by Season	139.8	139.5	135.0	Class Peak by Season	126.8	Colnoident Peak by Season	114.9	1	60,669 130,812 2	32.3%	270 746	67.7%	404,558	Customer Averages by Season		Seasonal Factors	%0.99	70.9%	%9.86		Seasonal Averages	4,033.66	3,345.60	
SUMMER V (May-Oct) (N	Summation	100.0	165.2	159.8	Class Pe	149.6	Colncident	148.9	0	160,669	33.1%	370 100	66.9%	484,744	Customer Av	-	Seaso 0.899	66.8%	71.8%	75.7%	, ,	Season 2,608,667	4,900.26	4,355.69	
Dec 12	117.1	1,11	115.5	113.3	8 90 F	103.4		93.7 20th@0800		20,516	30.3%	47 100	69.7%	67,708	31		0.800	79.2%	86.8%	%0'66		2,184,129	3,777.52	3,022.58	
Nov 12	122.8	125.0	122.4	118.7	119.7	109.2	:	103.0 5th@1900 20	┨	22,876	33.6%	45 20B	66.4%	68,084	32		0.839	76.0%	82.8%	%5'06		2,127,625	3,836.09	3,218.75	
Oct 12	137.2	1	136.9	131.0	128.8	123.3		126.0 1st@1700 5	4	25,056	34.6%	47.361	65.4%	72,417	32		0.918	72.3%	77.0%	78.7%		2,263,031	4,287.73	3,937.50	
Sep 12	140.0	5	139.1	136.6	132.2	130.7		113.9 2nd@1600 1		25,153	30.7%	56.778	69.3%	81,931	30		0.814	80.2%	84.9%	98.5%		2,731,033	4,666.96	3,796.67	
Aug 12	165.6		165.2	159.8	154.1	148.8		148.9 8th@1700 2		29,768	33.9%	58.043	66.1%	87,811	31		0.899	72.6%	78.0%	80.8%		2,832,613	5,341.71	4,803.23	
Jul 12	160.8		159.7	155.7	151.4	149.6		146.2 10th@1700		28,441	32.4%	59.339	%9'29	87,780	31		0.909	74.8%	79.4%	82.2%		2,831,613	5,188.35	4,716.13	
Jun 12	159.7		159.4	152.4	151.3	146.0		144.2 27th@1700 1		26,587	32.8%	54,470	67.2%	81,057	31		0.903	%5'69	73.4%	%0.77		2,614,742	5,152.73	4,651.61	
May 12	147.7		145.2	138.7	134.0	127.6		131.1 31st@1700 2		25,664	34.8%	48,084	65.2%	73,748	31	£	0.888	68.4%	75.4%	77.1%		2,378,968	4,764.08	4,229.03	
Apr 12	139.8		139.5	135.0	130.2	126.8		114.9 22nd@1700 3		22,046	32.7%	45,372	67.3%	67,418	31	hours ner mon	0.822	%0.99	70.9%	80.4%		2,174,774	4,511.15	3,706.45	
Mar 12	129.5		128.2	125.3	118.2	113.0		100.5 8th@0800 22		22,449	32.7%	46,201	67.3%	68,650	31	All load factors are calculated hased on 730 house narmonth	0.776	72.6%	79.5%	93.6%		2,214,516	4,179.02	3,241.94	
Feb 12	121.4		120.2	118.3	107.6	105.5		15th@0800		21,592	32.7%	44,439	67.3%	66,031	31	are calculated	0.835	74.5%	84.1%	89.3%		2,130,032	3,915.49	3,267.74	
Jan 12	123.5		117.6	121.1	105.9	104.8		13th@0800 1		21,333	32.0%	45,334	%0.89	299'99	31	All load factors	0.908	74.0%	86.3%	81.5%		2,150,548	3,982.69	3,616.13	
	SUMMATION IND MAX (MW) Non-Timed		On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW)	Time	ENERGY (MWH)	On-Peak	%	Off-Peak	%	Total	CUSTOMERS Monthly Count	FACTORS	Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES	Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (kW)	

TOU Periods - All Months: On-Peak Off-Peak 11 am, M-F & All Weekends

On-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F& All Weekends

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** General Service E-35 ***

SUMMER WINTER ANNUAL (May-Oct) (Nov-Apr)	tion Ind Max by Season 293.4	295.1 269.1 295.1 330.5 290.6 330.5	s Peak by Season	279.4 256.7 279.4	Coincident Peak by Season 254.2 231.7 254.2	Energy Summation by Season 307,281 278,816 586,197 29.5%		948,086 1,9	Seas	Seasonal Factors	73 86/	84.3%	98.0%	easonal Averages	4,086,921 4	6,130.15 5,738.07 5,934.11
Jan 12 Feb 12 Mar 12 Apr 12 Jun 12 Jul 12 Aug 12 Sep 12 Oct 12 Nov 12 Dec 12	273.9 281.2 292.1 293.4 307.2 311.2 325.7 331.8 332.1 302.8 289.1 291.4 248.6 250.2 264.4 269.1 273.9 275.0 286.8 295.1 286.3 272.8 260.1 267.0 267.0 286.8 295.1 286.3 272.8 260.1 267.0 267	328.5 330.5 299.8 284.1	223.2 229.7 240.4 242.7 245.7 250.2 255.8 258.7 256.0 250.9 246.9 243.4	264.4 256.7	223.2 213.7 222.2 219.2 230.8 237.2 254.2 245.2 236.6 242.5 231.7 220.8 13th@0800 15th@0800 22nd@1700 31st@1700 27th@1700 10th@1700 8th@1700 5th@1900 20th@0800	45,312 46,133 48,042 47,803 52,239 48,228 53,236 54,874 47,923 50,782 48,346 43,280 29,5% 29,9% 29,4% 29,3% 30,6% 28,6% 29,1% 30,5% 30,5% 30,5% 27,5% 30,5% 30,5% 27,5%		 	39 39 39 39 39 39 40 40 39 38 38	All load factors are calculated based on 730 hours per month. 0.815 0.760 0.761 0.751 0.762 0.780 0.739 0.712 0.801 0.802 0.758		91.1% 88.7% 88.1% 88.3% 90.4% 85.4% 89.7% 89.5% 89.7% 85.1% 84.6% 83.4%		3,938,462 3,956,179 4,189,949 4,183,333 4,377,333 4,323,872 4,690,769 4,497,850 4 356,600 4 213,022 4134,247 1,000,000	8,295.92 8.303.55 7 764.34	6,130,00 5,915,00 6,217.95 6,097.37
SUMMATION IND MAX (MW)	Non-Timed On-Peak	Off.Peak	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (KWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

Off-Peak 9 pm - 11 am, M-F & All Weekends

On-Peak 11 am 9 pm, M-F

TOU Periods - All Months:



Load Research Cost of Service Data Test Year Ended December 31, 2012

*** STREETLIGHTS ***

ANNUAL	33.6	33.6	33.6	33.6	33.6	0.0	on 20,862 14.4%	124,255 85.6%	145,117	on 984	0.000	49.3%	49.3%	0.0%	12,295	34.16	0.00
WINTER A	d Max by Seas	33.6	33.6	Class Peak by Season 3.6 33.6	33.6	Coincident Peak by Season	ation by Seas 12,038 16.0%	63,211 84.0%	75,249]	rages by Seas	Seasonal Factors	51.1%	51.1%	0.0%	Seasonal Averages	34.19	0.00
SUMMER WI (May-Oct) (No	Summation Ind Max by Season 33.6	33.6	33.6	Class Pea	33.6	Coincident P	Energy Summation by Season 8,824 12,038 12.6% 16,0%	61,044 87.4%	69,868	Customer Averages by Season 985 983	Season: 0.000	47.5%	47.5%	%0.0	Seasona 11,828	34.13	00.00
Dec 12	33.6	33.6	33.6	33.6	33.6	0.0 20th@0800	2,178	10,269	12,447	686	0.000	20.7%	20.7%	%0.0	12,585	33.97	0.00
Nov 12	33.6	33.6	33.6	33.6	33.6	0.0 5th@1900 20	2,200	9,199	11,399	066	0.000	46.5%	46.5%	0.0%	11,514	33.94	00:00
Oct 12	33.6	33.6	33.6	33.6	33.6	0.0 1st@1700	2,147	9,715	11,862	686	0.000	48.4%	48.4%	%0:0	11,994	33.97	0.00
Sep 12	33.6	33.6	33.6	33.6	33.6	0.0 2nd@1600	1,554 13.6%	9,876	11,430	986	0.000	46.6%	46.6%	0.0%	11,592	34.08	0.00
Aug 12	33.6	33.6	33.6	33.6	33.6	0.0 8th@1700 2	1,430	10,198 87.7%	11,628	688	0.000	47.4%	47.4%	%0:0	11,829	34.18	00:00
Jul 12	33.6	33.6	33.6	33.6	33.6	0.0 10th@1700	1,134	10,323 90.1%	11,457	981	0.000	46.7%	46.7%	%0:0	11,679	34.25	00:00
Jun 12	33.6	33.6	33.6	33.6	33.6	0.0 27th@1700 1	1,163	10,706	11,869	984	0.000	48.4%	48.4%	%0.0	12,062	34.15	0.00
May 12	33.6	33.6	33.6	33.6	33.6	0.0 31st@1700 2	1,395	10,227	11,622	984	0.000	47.4%	47.4%	%0:0	11,811	34.15	00:00
Apr 12	33.6	33.6	33.6	33.6	33.6	0.0 22nd@1700 3	1,499	10,123 87.1%	11,622	086	All load factors are calculated based on 730 hours per month. 0.000	47.4%	47.4%	%0:0	11,859	34.29	00:00
Mar 12	33.6	33.6	33.6	33.6	33.6	0.0 8th@0800 22	1,687	10,279 85.9%	11,966	086	based on 730 0.000	48.8%	48.8%	0.0%	12,210	34.29	0.00
Feb 12	33.6	33.6	33.6	33.6	33.6	0.0 15th@0800	2,598 15.6%	14,057 84.4%	16,655	086	are calculated 0.000	%6.79	%6'.29	%0.0	16,995	34.29	0.00
Jan 12	33.6	33.6	33.6	33.6	33.6	0.0 13th@0800 1	1,875	9,285	11,160	978	All load factors	45.5%	45.5%	%0.0	11,411	34.36	00:00
<u> </u>	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Ой-Реак	CLASS PEAK (MW) On-Peak	Off-Peak	COINCIDENT (MW) System Time	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (KWh)	Ind. Max Demand (kW)	Coincident Demand (kW)

On-Peak Off-Peak 11 am 9 pm, M-F 9 pm - 11 am, M-F & All Weekends

TOU Periods - All Months:

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Load Research Cost of Service Data Test Year Ended December 31, 2012

*** DUSK TO DAWN ***

ANNUAL	ason	\$ W	4 4		5.4		3,314 14.3%	19,834	23,148	35on 8,239	0.000	48.9%	48.9%	%0 :0	234	0 68	0.00	
WINTER (Nov-Apr)	Summation ind Max by Season	5.4	5.4	Class Peak by Season 5.41	5.4	Coincident Peak by Season 0.0	Energy Summation by Season 1,458 1,856 12.6% 16.0%	9,727 84.0%	11,583	Customer Averages by Season 8,227 8,262	Seasonal Factors	49.0%	49.0%	0:0%	Seasonal Averages	0.65	0.00	
SUMMER W	Summation I	5.4	5.4	Class Pe	5.4	Coincident 0.0	Energy Sumr 1,458 12.6%	10,107	11,565	Customer Ave 8,227	Season 0.000	48.9%	48.9%	0.0%	Season: 234	0.66	0.00	
Dec 12	1 2	5.4	5.4	5.4	5.4	0.0 20th@0800	336	1,585 82.5%	1,921	8,263	0.000	48.7%	48.7%	%0.0	232	0.65	0.00	
Nov 12	5.4	5.4	5.4	4.0	5.4	0.0 5th@1900 20	370	1,546	1,916	8,249	0.000	48.6%	48.6%	%0.0	232	0.65	00.00	
Oct 12	5.4	5.4	5.4	5.4	5.4	0.0 1st@1700 5i	347	1,569	1,916	8,258	0.000	48.6%	48.6%	%0:0	232	0.65	0.00	
Sep 12	5.4	5.4	5.4	5.4	5.4	0.0 2nd@1600	262 13.6%	1,662	1,924	8,208	0.000	48.8%	48.8%	%0:0	234	0.66	0.00	
Aug 12	5.4	5.4	5.4	5.4	5.4	0.0 8th@1700 2	237	1,691	1,928	8,213	0.000	48.9%	48.9%	%0.0	235	99.0	0.00	
Jul 12	5.4	5.4	5.4	5.4	5.4	0.0 10th@1700 8	193	1,756 90.1%	1,949	8,217	0.000	49.4%	49.4%	%0.0	237	99.0	00.0	
Jun 12	5.4	5.4	5.4	5.4	5.4	0.0 27th@1700 10	188	1,732	1,920	8,219	0.000	48.7%	48.7%	%0.0	234	99.0	0.00	
May 12	5.4	5.4	5.4	5.4	5.4	0.0 31st@1700 27	231	1,697	1,928	8,248	0.000	48.9%	48.9%	%0:0	234	0.65	0:00	
Apr 12	5.4	5.4	5.4	5.4	5.4	0.0 22nd@1700 3	252 12.9%	1,698	1,950	8,252	All load factors are calculated based on 730 hours per month. 0.000	49.5%	49.5%	0.0%	236	0.65	0.00	
Mar 12	5.4	5.4	5.4	5.4	5.4	0.0 8th@0800 22	273	1,662	1,935	8,250	based on 730 0.000	49.1%	49.1%	%0:0	235	0.65	0.00	
Feb 12	5.4	5.4	5.4	5.4	5.4	0.0 15th@0800	302 15.6%	1,631	1,933	8,248	are calculated 0.000	49.0%	49.0%	%0.0	234	0.65	0.00	
Jan 12	5.4	5.4	5.4	5.4	5.4	0.0 13th@0800	324 16.8%	1,604	1,928	8,248	All load factors 0.000	48.9%	48.9%	%0.0	234	0.65	0:00	
	SUMMATION IND MAX (MW) Non-Timed	On-Peak	Off-Peak	CLASS PEAK (MW) On-Peak	Off-Peak	(w	ENERGY (MWH) On-Peak %	Off-Peak %	Total	CUSTOMERS Monthly Count	FACTORS Coincident Factor (CP)	Load Factor (Max) %	Load Factor (NCP) %	Load Factor (CP) %	CUSTOMER AVERAGES Energy Use (kWh)	Ind. Max Demand (kW)	Coincident Demand (kW)	

Tab III

R14-2-703 Section A.3

Attached is the number of customers by customer class for each of the previous ten years.

Tab III

R14-2-207 Section A.3 - Customers by Customer Class for Previous Ten Years

Customer Class	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Residential	828,366	859,069	896,472	936,464	966,013	977,944	983,539	989,877	994,244	1,005,074
Commercial	98,424	102,393	106,374	110,547	115,304	118,945	120,305	120,229	121,116	122,360
Industrial and Irrigation	3,681	3,730	3,794	3,871	3,927	3,933	3,857	3,777	3,744	3,721
Public Street Lighting	778	794	808	831	913	919	918	1,001	972	982
Other Public Authorities	210	199	191	182	170	164	162	163	160	159
Total Number of Customers	931,459	966,185	1,007,640	1,051,895	1,086,327	1,086,327 1,101,905		1,108,781 1,115,047 1,120,236	1,120,236	1,132,296

Tab IV

R14-2-703 Section: A.4

Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of management measure.

APS DSM Electric Savings January - December 2012

DSM Program	Savings MW	Annual MWh Savings	Lifetime MWh Savings
Residential			
Consumer Products	14.9	142,774	915,718
Existing Homes	13.7	22,069	270,665
New Construction	7.7	14,002	280,044
Appliance Recycling	2.1	11,873	71,241
Behavioral	3.9	23,543	23,543
Multi-Family	0.4	5,380	45,896
Shade Trees	0.3	477	14,297
Low Income	0.3	2,503	43,809
Totals for Residential	43.3	222,621	1,665,213
Non-Residential			
Large Existing Facilities	26.4	192,263	2,530,369
New Construction	4.9	31,905	467,012
Small Business	4.3	25,595	343,337
Energy Information Services	0	0	0
Schools	3.8	24,523	340,383
Total for Non-Residential	39.4	274,286	3,681,101
Subtotal	82.7	496,907	5,346,314
Codes & Standards	0.6	2,332	23,320
DR Contribution	0	52,400	0
DSM Total	83.3	551,639	5,369,634

Program/initiatives	Load Reduction (MW)	Energy Savings Year-to- Date
APS Peak Solutions	63	275,940
Critical Peak Pricing	0.6	2,453
Time of Use Rates & Super Peak	118.2	517,585
Total	181.8	795,978

Tab V

R14-2-703 Sections B.1.a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r

Portions of this information are competitively confidential and have been redacted. An unredacted version is being provided to Staff pursuant to an executed Protective Agreement.

Tab V R14-2-703 Section: B.1.a, b, c, d, e, f, g, h, j, l, m, n, o

2012 GENERATING UNIT INFORMATION - REDACTED

BASE LOAD, INTERMEDIATE, OR PEAKING UNIT	Base load Base load	Base load Base load Base load Base load Base load	Base load Base load Base load	Base load Base load Base load	Peaking Peaking Intermediate Intermediate Intermediate Intermediate Intermediate	Peaking Peaking Peaking Peaking	Intermediate Intermediate	Peaking Peaking Peaking Peaking Peaking	Peaking Peaking Peaking Peaking Peaking Peaking Peaking Peaking Peaking	Peaking	Peaking Peaking Peaking Peaking Peaking	intermittent intermittent Intermittent Intermittent
UNIT MUST BE RUN IF AVAILABLE	Yes			111	111111					i		1111
MINIMUM CAPACITY COAL/ NUCLEAR	381.5	ଞଞ୍ଚିତ୍ର	30 75 75	8 8 8	1111111				.			1111
MINIMUM CAPACITY GAS/OIL												
FUEL												
<u> </u>	1											
VARIABLE O & M \$MWH Over Minimum												
VARIABLE O 8 M \$MWH To Minimum												
ξτ <u>Θ</u>												
FUEL COS \$MBTL Gas												:
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	•											
S %08												
Hear 100%												
HEAT RAT BTU/KWI Coal/OII/Nuc	'											:
		,221 ,143 ,029 ,974	472 942 424	,075 ,059 ,932	208 909 308 297 218 (038 671	,064 ,106 ,962	323	0 0 963 130	242 242 242 336 336 330 330 331 332 332	322	888 7748 964 320	
	1 255		222	5 5 8	23 23 11 11 10 10 7	20 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		. 82 EE	55555	ř.	2	1111
CAPACI												
UM ITY (N4) Winter	382	170 170 220 115.5	116 260 271	601 601 601	62 92 92 93 120 93 93	110 110 62 62	506 506	110 100 100 100 100 100 100 100 100 100	111111111	. 6	222244	12 17 14
		0 0 0 12 15	\$ 0 =		0.4 m m m 0.0	9900	4 1-	99een				
	888		2 28 2				74.4		44444444		2 2 2 2 4 4	15 t t t t t t t t t t t t t t t t t t t
(APS SHARE CAPACITY MW	382 382 382	170 170 220 115.5	116 260 271	105 201 301	55 56 88 88 88 117	55 56 58	492	110/110 100/100 55/54 (N3) 55/64 (N3) 79	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ā	19/19 (N3) 19/19 (N3) 55/54 (N3) 54 48	17 (N10) 16 (N10) 17 (N10) 19.6 (N10)
TYPE OF UNIT OR CONTRACT	Vuclear Steam Vuclear Steam Vuclear Steam	Steam Steam Steam Steam	Steam Steam Steam	Stearn Stearn Stearn	CT CT ombined Cycl ombined Cycl ombined Cycl ombined Cycl	Steam Stream CT	ombined Cycle	Steam Steam CT CT	555555555	5	555555	Solar PV Solar PV Solar PV Solar PV
BOOK	2044	2012 2012 2012 2038 2038	2028 2033 2035	2026 2026 2026	2028 2028 2028 2038 2038 2038 2038 2038	2020 2020 2020 2020	2037	2020 2020 2020 2020 2037	2037 2037 2037 2037 2037 2037 2037 2037	5050	2043 2043 2043 2043 2043	2041 2041 2042
SERVICE	1986 1986 1988	1963 1964 1969 1970	1962 1978 1980	1974 1975 1976	1972 1973 1976 1976 1976 2001 2003	1960 1972 1972	2002	1954 1955 1972 1973 2002	2002 2002 2002 2002 2002 2002 2002 200	1972	1971 1971 1973 1974 2008	2011 2012 2012
PLANT	Palo Verde Unit 1 Unit 2 Unit 3	Four Comers Unit 1 Unit 2 Unit 3 Unit 4	Cholla Unit 1 Unit 2 Unit 3	Navajo Unit 1 Unit 2	West Phoenix CT 1 CT 2 CC 1 CC 2 CC 3 CC 4 CC 4	Ocotillo Unit 1 ST Unit 2 ST Unit 1 CT	Redhawk CC 1 CC 2	Saguaro Unit 1 ST Unit 2 ST Unit 1 CT Unit 2 CT Unit 3 CT	Sundance Unit CT Unit CT Unit 3CT Unit 3CT Unit 5CT	Douglas Unit 1 CT	Yucca Unit 1 CT Unit 2 CT Unit 3 CT Unit 6 CT Unit 6 CT	Solar Cotton Center Hyder 1 Paloma Chino Valley
	N BOOK TYPE OF (APS SHAFE) MAXMAW AMPRIAN AM	SERVICE LIFE CONTRACT CAPACITY CAP	National Part Part	SEWING LICE LICE	SERVICE LIFE CONTINUED CAMPAINA CA	SPACE SPACE CAPS SMARIE CAPS SMARIE	Strict Coulty County C	State 10 ct 10 c	1	Column C		

NOTES:

1) Ad data is based on historical information, unless otherwise indicated.

2) Any, but ocst (fem g) is based on all hall expenses reported in FERC Form 1.

2) First unable indicates net maximum captured not wasturing gats second number indicates net maximum captured or 4.5 summer indicates net maximum captured are the second number indicates net maximum captured or 4.5 summer and where maximum captured are the based on gas filling when applicable (i.e., Saguero and Yucca).

5) Net maximum capturely based on Maximum Dependable Capturity.

6) Unit cost adjusted to allocate the off over each generating unit and its respective oil burn.

7) Variatic book \$40 WMMH to immum (tem h) for the OT's expresents total start-up dollers, not \$40 WHH.

9) Majour Sprit &2 meanre shut down since Nov 2009

9) Major inspections completed on West Phoenix CT 182, Seguero CT2 and Ocostillo CT1.82 in 2012

11) Full year of date is not yet available.

Tab V

R14-2-703 Section: B.1.p

Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation.

2012 Unit Emissions Rate

Plant	Unit	SO2 (ID/MWH	NOx (ID/MWH	CO2 (ton/MWH	PM10 (Ib/MWH	CO {ID/MWH	VOC (Ib/MWH	Hg (ID/GWH	MWH (Ib/MWH based on
		based on	based on	based on	based on	based on	based on	based on	Ownership)
Four Corners		1.57	8.58	2317	0.328	0.302	0.002	0.0821	1 002 427
Four Corners	1	1.57	8.58 7.41	2317	0.328	0.302	0.002		1,062,437
	2	2.16	7.41 7.90	2702	0.281	0.300	0.001	0.0817	1,071,681
	4	1.43	7. 3 0 4.74	1984	0.277	0.303	0.002	0.0792 0.0198	1,415,152
	5	1.70	4.65	1987	0.252	0.285	0.001	0.0198	696,660 712,469
		1.70	4.03	1307	0.030	0.203	0.001	0.0137	712,403
	Plant	1.72	7.03	2,330	0.25	0.30	0.0016	0.063	4,958,399
Navajo	1	0.637	2.37	2560	0.302	0.235	0.0282	0.0295	548,645
	2	0.385	1.75	1797	0.302	0.234	0.0282	0.0295	549,066
	3	0.549	1.69	1729	0.298	0.232	0.0278	0.0291	540,285
	Plant	0.52	1.94	2,030	0.30	0.23	0.0280	0.029	1,637,996
Cholla	1	1.657	2.634	2457	0.063	0.268	0.032	0.036	830,109
	2	2.065	3.283	2406	0.317	0.280	0.034	0.126	1,812,483
	3	1.727	2.447	2511	0.167	0.267	0.032	0.034	1,638,310
	Plant	1.857	2.84	2,456	0.21	0.27	0.033	0.073	4,280,902
Ocotillo	1	0.0099	1.442	1,558	0.090	0.284	0.065	0.0030	40,416
	2	0.0067	1.613	1,597	0.093	0.291	0.067	0.0031	29,854
	CT1	0.0121	6.434	2,345	0.133	1.649	0.042	0.0050	2,357
	CT2	0.0126	6.708	2,445	0.138	1.719	0.044	0.0052	1,756
	Plant	0.009	1.8	1,620	0.094	0.36	0.065	0.0032	74,383
West Phoenix	CC1	0.0068	3.34	1,319	0.072	0.147	0.024	0.0028	76,032
	CC2	0.0068	3.33	1,318	0.072	0.147	0.024	0.0028	65,047
	ССЗ	0.0061	0.49	1,198	0.053	0.540	0.079	0.0026	68,734
	CC4	0.0062	0.37	1,094	0.034	0.015	0.038	0.0025	96,940
	CC5	0.0046	0.15	916	0.021	0.025	0.005	0.0019	1,963,239
	CT1	0.0361	19.27	7,023	0.397	4.937	0.126	0.0151	1,165
	CT2	0.0143	7.65	2,789	0.158	1.961	0.050	0.0060	46
	Plant	0.005	0.38	960.5	0.026	0.050	0.010	0.0020	2,271,203
Redhawk	CC1	0.0045	0.073	870	0.019	0.061	0.0007	0.0018	2,244,065.00
	CC2	0.0044	0.074	881	0.022	0.061	0.0033	0.0018	2,429,675.00
	Plant	0.0045	0.074	876	0.021	0.06	0.0021	0.0018	4,673,740

Tab V

R14-2-703 Section: B.1.p

Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation.

2012 Unit Emissions Rate

Plant	Unit	SO2 (IB/MWH based on	NOx (ID/MWH based on	CO2 (ton/MWH based on	PM10 (ID/MWH based on	CO (ID/MWH based on	VOC (ID/MWH based on	Hg (ID/GWH based on	MWH (ID/MWH based on Ownership)
Yucca	ст1	0.0101	5.40	1,970	0.111	1.38	0.035	0.0042	3,602
Tucca	CT2	0.0099	5.29	1,928	0.111	1.36	0.035	0.0042	3,480
	СТЗ	0.0133	5.09	1,841	0.103	1.28	0.033	0.0041	27,260
	CT4	0.8679	18.45	3,381	0.241	0.07	0.009	0.0252	612
	CT5	0.0073	0.23	1,349	0.060	0.02	0.022	0.0026	54,593
	ст6	0.0067	0.23	1,357	0.059	0.01	0.022	0.0026	59,993
	Plant	0.011	1.21	1476	0.070	0.31	0.024	0.0030	149,540
Saguaro	CT1	0.018	9.6	3,498	0.198	2.46	0.063	0.0075	. 651
	CT2	0.012	6.39	2,329	0.132	1.64	0.042	0.0050	1,382
	СТЗ	0.014	1.0	1,685	0.043	0.23	0.044	0.0033	14,574
	Plant	0.014	1.78	1810	0.057	0.44	0.044	0.0036	16,607
Douglas	ст1	1.30	27.6	5,051	0.36	0.103	0.0128	0.038	131
	Plant	1.30	27.6	5,051	0.36	0.103	0.0128	0.038	131
Sundance	All	0.0067	0.28	1,336	0.076	0.13	0.035	0.0023	134,675
	Plant	0.0067	0.28	1,336	0.076	0.13	0.035	0.0023	134,675
Nuclear	All	0	0	. 0	0	0	0	0	9,292,770
Hydro	All	0	0	0	0	0	0	0	0
Biomass	All	0	0	0	0	0	. 0	0	0
Solar	All	0	0	0	0	0	0	0	139,139
TOTAL COAL*		1.6	4.6	2,334	0.24	0.28	0.018	0.062	10,877,297
TOTAL GAS/OIL*	ŀ	0.0049	0.22	933	0.025	0.07	0.006	0.0019	7,320,279
TOTAL FOSSIL*		0.955	2.8	1,770	0.16	0.20	0.013	0.038	18,197,576
TOTAL APS *Ib/GWH		0.63	1.9	1,166	0.10	0.13	0.009	0.025	27,629,485

^{*}Does not include biomass

Tab V

R14-2-703 Section: B.1.p

Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur mercury, particulates, and other air emissions subject to current or expected future environmental regulation.

2011 Unit Emissions Rate (Tons per year based on Ownership)

Plant	Unit	SO2	NOx	CO2	PM10	со	voc	Hg	MWH
Four Corners	1	835	4,559	1,230,899	174.0	160.5	0.9	0.044	1,062,437
	2	805	3,972	1,234,121	150.5	161.0	0.8	0.044	1,071,681
	3	1,528	5,590	1,911,875	195.7	214.5	1.30	0.056	1,415,152
	4	497	1,651	691,211	87.6	100.2	0.5	0.007	696,660
	5	606	1,656	708,012	20.7	101.6	0.5	0.007	712,469
	Plant	4272	17,428	5,776,117	628.5	737.8	3.98	0.16	4,958,399
Navajo	1	175	650	702,359	82.8	64.4	7.7	0.0081	548,645
	2	106	481	493,241	82.8	64.4	7.7	0.0081	549,066
	3	148	455	467,160	80.4	62.5	7.5	0.0079	540,285
	Plant	429	1586	1,662,760	246.0	191.4	23.0	0.024	1,637,996
Cholla	1	688	1,093	1,019,761	-26.1	111.3	13.5	0.02	830,109
	2	1,872	2,975	2,180,383	287.4	253.9	30.7	0.11	1,812,483
	3	1,415	2,005	2,056,792	136,5	218.6	26.5	0.03	1,638,310
	Plant .	3974	6,073	5,256,936	450.1	583.8	70.7	0.16	4,280,902
Ocotillo	1	0.20000	29.1	31,482	1.8	5.7	1.32	0.000061	40,416
	2	0.10000	24.1	23,845	1.39	4.3	1.00	0.000046	29,854
	CT1	0.01422	7.6	2,764	0.2	1.9	0.05	0.000006	2,357
	CT2	0.01104	5.9	2,147	0.1	1.5	0.04	0.000005	1,756
	Plant	0.00875	66.7	60,237	3.5	13.5	2.40	0.00012	74,383
West Phoenix	CC1	0.258	126.8	50,147	2.751	5.6	0.903	0.0001075	76,032
	CC2	0.220	108.4	42,858	2.351	4.8	0.772	0.0000919	65,047
	ссз	0.208	16.8	41,188	1.830	18.6	2.710	0.0000878	68,734
	CC4	0.300	17.8	53,036	1.670	0.7	1.862	0.0001216	96,940
	CC5	4.500	151.3	899,355	20.306	24.4	5.161	0.0018825	1,963,239
	CT1	0.021	11.2	4,091	0.231	2.9	0.074	0.0000088	1,165
	CT2	0.0003	0.2	64	0.004	0.045	0.001	0.000001	46
	Plant	0.0049	432.6	1,090,740	29.14	57.0	11.48	0.002	2,271,203
Redhawk	CC1	5.0	82.1	975,710	21.1	67.9	0.8	0.0021	2,244,065.00
	CC2	5.4	90.1	1,070,835	27.0	74.6	4.1	0.0022	2,429,675.00
	Plant	10.4	172.2	2,046,545	48.1	142.5	4.9	0.0043	4,673,740

Tab V

R14-2-703 Section: B.1.p

Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur mercury, particulates, and other air emissions subject to current or expected future environmental regulation.

2011 Unit Emissions Rate (Tons per year based on Ownership)

Plant	Unit	SO2	NOx	CO2	PM10	со	voc	Hg	мwн
Yucca	CT1	0.0183	9.73	3,548	0.20	2.49	0.06	0.0000076	3,602
	CT2	0.0173	9.20	3,355	0.19	2.36	0.06	0.0000072	3,480
	CT3	0.1807	69.4	25,095	1.42	17.5	0.45	0.0000549	27,260
	CT4	0.2656	5.6	1,034	0.07	0.02	0.003	0.0000077	612
	CT5	0.2000	6.2	36,822	1.63	0.51	0.60	0.0000713	54,593
	ст6	0.2000	6.9	40,713	1.8	0.35	0.65	0.0000774	59,993
	Plant	0.88	107	110,567	5.3	23.2	1.8	0.00023	149,540
Saguaro	СТ1	0.006	3.1	1,138	0.06	0.80	0.02	0.000002440	651
	CT2	0.008	4.4	1,610	0.09	1.13	0.03	0.000003450	1,382
	стз	0.100	7.2	12,278	0.32	1.7	0.32	0.000023919	14,574
	Plant	0.114	14.8	15,026	0.47	3.62	0.37	0.00002981	16,607
Douglas	СТ1	0.08	1.8	331	0.024	0.007	0.0008	0.000002	131
	Plant	0.08	1.8	331	0.024	0.007	0.0008	0.000002	131
Sundance	All	0.45	17.1	89,995	5.1	8.7	2.3	0.000153	134,675
	Plant	0.45	17.1	89,995	5.1	8.7	2.3	0.00015	134,675
Nuclear	All	0	0	0	0	0	0	0	9,292,770
Hydro	All	0	0	0	0	0	0	0	0
Biomass	All	0	0	0	0	0	0	0	0
Solar	All	0	0	. 0	0	0	0	0	139,139
TOTAL COAL**		8,675	25,088	12,695,813	1,325	1,513	97.7	0.33828	10,877,297
TOTAL GAS/OIL**		17.8	812	3,413,442	92	249	23.3	0.00713	7 220 270
TOTAL GAS/OIL		17.6	012	5,413,442	92	249	23.3	0.00713	7,320,279
TOTAL FOSSIL**		8,693	25,900	16,109,255	1,416	1,761	121.0	0.34541	18,197,576
TOTAL		8,693	25,900	16,109,255	1,416	1,761	121.0	0.34541	27,629,485

^{*}Units are measured in lb/GWh

^{**}Does not include biomass

Tab V

R14-2-703 Section: B.1.q

Water consumption quantities and rates

2012 Generation Water Use¹

	Acre Feet Consumed	Gallons/MWH
Cholla	10,382	769
Four Corners	8,324	530
Navajo	3,353	491
Ocotillo	285	1162*
Palo Verde Groundwater	660	23
Palo Verde Effluent	20,420	716
Palo Verde Total	21,080	739
Redhawk Groundwater	606	42
Redhawk Effluent	3,713	256
Redhawk Total	4,319	298
Saguaro	136	3809*
Sundance	157	389
West Phoenix	2,873	451
Yucca	329	1590**
Total APS Generation	51,238	656

^{*}Ocotillo and Saguaro are unique in the APS fleet as peaking facilities which produce energy typically only when energy demands are high. However, they require using water on a continual basis to maintain systems on site. The G/MWH rates for these facilities are misleading due to the relatively small quantities of energy generated. In absolute terms, they only account for 0.29% of APS water usage in 2012 and are critical to supporting APS obligation to serve our customers.

^{**} Yucca water intensity was atypical in 2012 because the IID steam Unit required cooling tower replacement and was out of service for much of the year.

¹ All numbers represent APS share of ownership.

Tab V

R14-2-703 Section: B.1.r

Tons of coal ash produced per generating unit - 2012¹

		Tons Fly Ash	Tons Bottom Ash
Cholla	Unit 1	53,872	13,468
	Unit 2	123,265	30,816
	Unit 3	107,007	26,752
	Total Cholla	284,144	71,036
Four Corners	Units 1,2,3	446,513	111,628
	Units 4,5 ²	156,279	39,070
	Total Four Corners	602,792	150,698
	Total Company	886,936	221,734

Numbers represent APS's share of ownership of coal plants.
 Numbers are based on APS's 15% share of ownership in the Four Corners Coal Plant units 4 and 5.

R14-2-703 Section: B.1.b,c, d, f, h, i, k, & m

2012 Purchased Power Information 1

	(B.1.a)	(8.1.b)	(B.1.m)	(B.1.c/B.1.d)	(B.1.f)	(8.1.1)	(B.1.k)	(B.1.h)
Company	in-service date and book life or contract period	Type of generating unit or contract	Minimum Capacity {MW}	Maximum Contract Capacity (MW)	Average Heat Rate (BTU/kWh)	Average Energy Cost 2012 (\$/MWH)	Annual Demand Charge (\$)	Var O&M (\$/MWh)
Salt River Project (Eastern Area)	6/15/2010 - 6/14/2020	WSPP Agreement	o	09				
City of Azusa Exchange	1/1/2012 - 12/31/2012	WSPP Agreement	930	30				
PAC Exchange	9/21/1990 - 10/31/2020	Grandfathered Agreement	e/u	480				
CE Turbo LLC ²	1/27/2006 - 12/31/2029	Geothermal	0	12				
Aragonne Wind LLC ²	12/29/2006 - 12/31/2026	Wind	0	06				
Snowflake White Mountain ²	6/10/2008 - 5/15/2023	Biomass	0	14.5				
High Lomesome Wind Ranch, LLC	7/18/2009- 7/18/2039	Wind	0	100				
Glendale Energy, LLC ²	1/13/2010 - 1/13/2030	Landfill Gas	0	2.86				
RE Ajo 1, LLC²	9/27/2011 - 9/26/2036	Solar	0	4.5				
RE Bagdad Solar 1, LLC ²	12/30/2011 - 12/29/2036	Solar	0	15				
Perrin Ranch Wind, LLC ²	6/25/2012 - 6/24/2037	Wind	0	99.2				
SunE A21, LLC ²	11/29/2011 - 11/28/2041	Solar	0	10.0				
SunE AZ2, LLC ²	12/20/2012 - 12/19/2042	Solar	0	10.0				
Waste Management Renewable Energy, LLC ²	8/28/2012 - 08/30/2012	Landfill Gas	0	3.2				
			5	7.0				

Notes:

1 Reflects contracts greater than or equal to 1 year in duration.

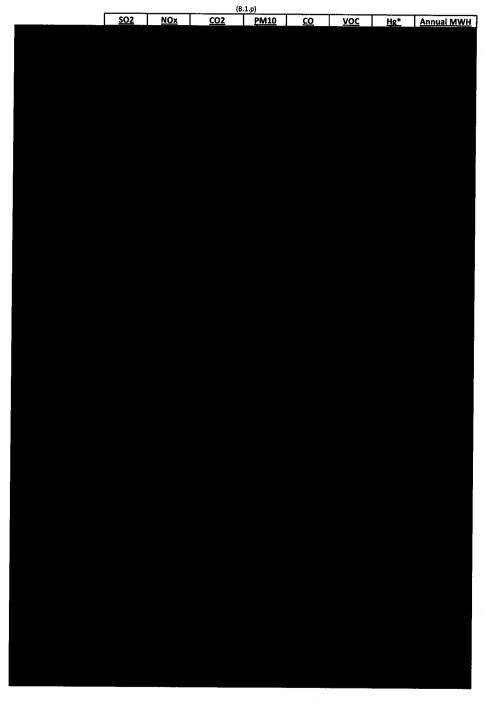
2 Renewable energy contracts.

Tab V

R14-2-703 Section: B.1.p

2011 Emissions (Purchase Power Agreements)1- REDACTED

Total Tons



Tab V

R14-2-703 Section: B.1.p,q,r

2012Emissions/Water Use (Purchase Power Agreements)1 - REDACTED

lb/MWH							Generation	on Water Use		
			(B.1.p)					(B.1.r)	(B.1.q)
								Tons of Coal	Acre Feet	
<u>SO2</u>	<u>NOx</u>	<u>CO2</u>	PM10	co	voc	Hg*	Annual MWH	<u>Ash</u> ²	Consumed	Gallons/MWh



Tab VI

R14-2-703 Section B.2.a

A Description of Generating Unit Commitment Procedures

APS optimizes the use of its resources to serve native load in the most economical manner possible, while maintaining grid reliability. The process begins by forecasting the load on a day ahead basis. The load forecast is entered into a unit commitment and dispatch model (PCI GenTraderTM/GenPortalTM) that determines the most economic unit commitment plan for serving load, taking into account generating unit capabilities, intermittent resource production forecasts (wind, solar), fuel prices and transmission constraints. This commitment plan shows the units to be committed each hour, their projected loading level and the quantity of natural gas to be scheduled.

As part of the process, the model calculates prices for blocks of energy to help determine if it would be cheaper to buy power from the market rather than running generating units. The Day Ahead Trader compares these calculated block energy prices with actual power prices being offered in the market, then purchases either on-peak or off-peak blocks of energy, if economical. The model also calculates the breakeven price for making sales out of our generating units, after taking into account native load and any other pre-existing power sales commitments. If economical, the Day Ahead Trader will make block power sales in the market.

The day ahead commitment plan is turned over to Real Time Operations to implement. The Real Time Traders update the load and available resource forecasts and re-run the unit commitment and dispatch model to fine tune the commitment plan. They also check the hourly market to make purchases and sales of power to further optimize the system. Any Demand Response products that can be utilized within the day are also considered.

The Real Time Traders commit (start) and de-commit (shutdown) generating units as needed to meet load and sales commitments. They also update the plan as needed for generating unit or transmission outages, optimizing utilization of available resources. Additional items which must be considered during the unit commitment process include: jointly owned units which may be requested on-line by their owners, fuel supply issues, the need to operate units for voltage or other problems due to temporary line outages, unit minimum on-line and off-line time requirements, and environmental constraints.

Tab VI

R14-2-703 Section: B.2.b

2012 Production Cost

Total Power Production expenses for the Calendar Year 2011 including O&M, Fuel and Purchased Power were \$1,433,304,007 of which \$(87,001,176) was related to Deferred Fuel.

Fuel and Purchased Power expenses including interchange for the Calendar Year 2011 were \$987,202,246 of which \$(87,001,176) was related to Deferred Fuel.

Tab VI

R14-2-703 Section: B.2.c

2012 Reserve Requirement

The actual Reserve Margin for 2012 was 1196.4 MW or 27.5% at the time of system peak. Total resources and Class A Interruptible exceeded our load and firm off system sales by this amount.

Tab VI

R14-2-703 Section: B.2.d

2012 Spinning Reserve

The Company maintains spinning reserve in compliance with quotas assigned by the Southwest Reserve Sharing Group for the Calendar Year 2012, these quotas were:

2012	Spinning Reserve Capacity (MW)
January	175
February	170
March	174
April	164
May	228
June	264
July	295
August	297
September	278
October	233
November	204
December	206

Tab VI

R14-2-703 Section: B.2.e

2012 Reliability of Generating, Transmission and Distribution Systems

APS follows the Institute of Electrical and Electronics Engineers (IEEE) 1366 – 2003, "Guide for Electric Power Distribution Reliability Indices" for measuring reliability. Three of the most common indicators used for measuring reliability are SAIFI (System Average Interruption Frequency Index), SAIDI (System Average Interruption Duration Index) and CAIDI (Customer Average Interruption Duration Index). These indicators are calculated with "Major Event Days" excluded, in accordance with Sections 3.13, 4.5 and Annex B.

The data provided below will be the portion of SAIFI, SAIDI, and CAIDI due to Generation, Transmission, and Distribution causes, repectively. The total of all three is the overall reliability experienced by APS customers.

Generation Reliability	
SAIFI	0
SAIDI (minutes)	0
CAIDI (minutes)	0
Transmission Reliability	
SAIFI	0.23
SAIDI (minutes)	41
CAIDI (minutes)	183
Distribution Reliability	
SAIFI	0.63
SAIDI (minutes)	67
CAIDI (minutes)	107

Tab VI

R14-2-703 Section: B.2.f

2012 Power Purchase and Sales Prices

	Average		Average Sale
Month	Purchase Price		Price
Jan-12	\$29.76		\$33.26
Feb-12	\$27.02		\$30.72
Mar-12	\$21.05		\$28.57
Apr-12	\$18.05		\$32.85
May-12	\$23.90		\$32.72
Jun-12	\$28.49		\$40.43
Jul-12	\$32.05		\$41.92
Aug-12	\$35.64		\$45.48
Sep-12	\$29.61		\$34.57
Oct-12	\$29.41		\$34.67
Nov-12	\$17.44		\$34.07
Dec-12	\$20.61	To provide the second	\$34.64

Note 1: Average purchase price represents all short-term power purchases (less than 3 years) divided by the associated megawatt hours.

Note 2: Average sale price represents total short-term power sales (less than 3 years) divided by the associated megawatt hours.

Tab VI

R14-2-703 Section: B.2.g

2012 Energy Losses

Energy losses for the Calendar Year 2012 were 6.6%.

*Energy losses shown are exclusive of APS unregulated activities.

Tab VII

R14-2-703 Section B.3

Total Interconnected Distributed Generation kW

A. Total reported for end of 2012:

350,721.31 kW

Tab VIII

R14-2-703 Section: B.4

An explanation of any resource procurement processes used by the load-serving entity during the previous calendar year that did not include the use of an RFP, including the exception under which the process was used.

In 2012, APS had no resource procurement processes that did not include the use of an RFP.